

## Engineering

- Land/Site Development
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- Streetscapes & Public Amenities
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- Community & Residential
- Commercial & Institutional
- Environmental Restoration

## Proposed Residential Development 560 Hazeldean Road, Ottawa Transportation Impact Assessment

**Proposed Residential Development  
560 Hazeldean Road  
Transportation Impact Assessment**

Prepared By:

**NOVATECH**  
Suite 200, 240 Michael Cowpland Drive  
Ottawa, Ontario  
K2M 1P6

July 2025

Novatech File: 100057  
Ref: R-2025-035



## **Certification Form for Transportation Impact Assessment (TIA) Study Program Manager**

### **TIA Plan Reports**

On April 14, 2022, the Province's Bill 109 received Royal Assent providing legislative direction to implement the More Homes for Everyone Act, 2022 aiming to increase the supply of a range of housing options to make housing more affordable. Revisions have been made to the TIA guidelines to comply with Bill 109 and streamline the process for applicants and staff.

Individuals submitting TIA reports will be responsible for all aspects of development-related transportation assessment and reporting, and undertaking such work, in accordance and compliance with the City of Ottawa's Official Plan, the Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines.

By submitting the attached TIA report (and any associated documents) and signing this document, the individual acknowledges that they meet the four criteria listed below.

### **Certification**

- ☒ I have reviewed and have a sound understanding of the objectives, needs and requirements of the City of Ottawa's Official Plan, Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines (Update Effective July 2023);
- ☒ I have a sound knowledge of industry standard practice with respect to the preparation of transportation impact assessment reports, including multi modal level of service review;
- ☒ I have substantial experience (more than 5 years) in undertaking and delivering transportation impact studies (analysis, reporting and geometric design) with strong background knowledge in transportation planning, engineering or traffic operations; and

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**Revision Date: June, 2023**

## Transportation Impact Assessment Guidelines

☒ I am either a licensed or registered<sup>1</sup> professional in good standing, whose field of expertise [check ☒ appropriate field(s)]:

☒ is either transportation engineering

☐ or transportation planning.

Dated at  this  day of , 20.

(City)

Name:

Professional Title:

*Jennifer Luong*

Signature of Individual certifier that they meet the above four criteria

### Office Contact Information (Please Print)

Address:

City / Postal Code:

Telephone / Extension:

E-Mail Address:

### Stamp



<sup>1</sup> License of registration body that oversees the profession is required to have a code of conduct and ethics guidelines that will ensure appropriate conduct and representation for transportation planning and/or transportation engineering works.



July 30, 2025

City of Ottawa  
Planning, Development, and Building Services Department  
110 Laurier Avenue West, 4<sup>th</sup> Floor  
Ottawa, ON K1P 1J1

**Attention: Ms. Rochelle Fortier-Lesage**  
**Transportation Project Manager, Infrastructure Approvals**

Dear Ms. Fortier-Lesage:

**Reference: 560 Hazeldean Road**  
**Transportation Impact Assessment**  
**Novatech File No. 100057**

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We are pleased to submit the following Transportation Impact Assessment (TIA), in support of Zoning By-Law Amendment and Draft Plan of Subdivision applications at 560 Hazeldean Road, for your review and signoff. The structure and format of this report is in accordance with the City of Ottawa's *Revised Transportation Impact Assessment Guidelines* (June 2023).

If you have any questions or comments regarding this report, please feel free to contact Jennifer Luong, or the undersigned.

Yours truly,

**NOVATECH**



Joshua Audia, P.Eng.  
Project Engineer | Transportation

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## EXECUTIVE SUMMARY

This Transportation Impact Assessment (TIA) has been prepared in support of Zoning By-Law Amendment and Draft Plan of Subdivision applications for the property located at 560 Hazeldean Road. The subject property is approximately 8.65 hectares in area, and is currently occupied by the Kevin Haime Golf Centre. The existing development includes one full-movement access to Hazeldean Road.

The subject site is surrounded by the following:

- Hazeldean Road, followed by commercial uses and the Carp River to the north,
- A stormwater facility, followed by residential uses to the south,
- The Carp River, followed by residential uses to the east, and
- Residential uses, followed by Mantra Street or Bliss Crescent to the west.

The proposed development is a subdivision including 50 single-detached homes, 48 townhomes, an apartment block, and three private roadways. The concept for the block includes 185 apartment dwellings within two six-storey buildings. A total of 196 parking spaces are proposed (i.e. two parking spaces per unit). Access to the proposed development is proposed via one driveway to Hazeldean Road, one driveway to Energy Street, and one driveway to Bliss Crescent.

The development is anticipated to be constructed in two phases. Phase 1 includes the low-density residential and access to Energy Street and Bliss Crescent, with a buildout year of 2029. Phase 2 includes the apartment block and access to Hazeldean Road, with a buildout year of 2031. A subsequent Site Plan Control application will be filed in support of the apartment block. The subject site is designated as 'Corridor – Mainstreet (Hazeldean Road)' and 'Evolving Neighbourhood' on Schedule B5 of the City of Ottawa's *Official Plan*. The implemented zoning for the property is 'Agricultural Zone' (AG[263r]), and the site is located within the Fernbank Community Design Plan (CDP) area. A rezoning is required to permit the proposed residential uses.

The study area for this report includes the boundary roadway Hazeldean Road, as well as the following signalized intersections:

- Hazeldean Road/325m East of Iber Road (future Robert Grant Avenue);
- Hazeldean Road/Roger Griffiths Avenue;
- Hazeldean Road/Mantra Street/Tillage Street;
- Hazeldean Road/Terry Fox Drive;
- Hazeldean Road/Edgewater Street;
- Terry Fox Drive/Edgewater Street/Charlie Rogers Place;
- Terry Fox Drive/Tony Graham Rec Complex;
- Terry Fox Drive/Sobey's Access;
- Terry Fox Drive/Winchester Drive/Halkirk Avenue.

The selected time periods for this report are the weekday AM and PM peak hours, as they represent the 'worst case' combination of site generated traffic and adjacent street traffic. The Phase 1 buildout year 2029, Phase 2 buildout year 2031, and horizon year 2036 have been considered.

The conclusions and recommendations of this TIA are summarized as follows:

#### Access Intersections

- The proposed accesses to Energy Street and Bliss Crescent will be part of Phase 1, and will connect to the existing roadway blocks that have been constructed as part of the adjacent subdivision. The driveway to Hazeldean Road will be part of Phase 2, and is proposed in approximately the same location as the existing driveway serving the golf centre.
- The proposed accesses meet the relevant provisions of the City's *Private Approach By-Law* (PABL) and the Transportation Association of Canada (TAC)'s *Geometric Design Guide for Canadian Roads*. Parameters such as access grades and clear throat length will be confirmed in subsequent Site Plan Control applications.

#### Site-Generated Traffic

- The proposed development is estimated to generate 158 person trips (including 79 vehicle trips) during the AM peak hour, and 164 person trips (including 84 vehicle trips) during the PM peak hour.

#### Development Design

- A 3.0m-wide multi-use pathway (MUP) is proposed along the eastern side of the subject site, which will provide a connection for pedestrians and cyclists to the Carp River Pathway and the existing pathway around the perimeter of the stormwater pond immediately south of the subject site. Another pathway is proposed to run between the apartment block and low-density blocks. A pathway connection is also proposed to Street 3 at the southeast corner of the subdivision.
- Entrances to the low-density dwellings will generally be located within 400m walking distance of stop #1043. The proposed dwellings are anticipated to be located within 800m walking distance (i.e. a 10-minute walk) of stops #1042 and #1043. These stops are served by routes 61, 301, and 303. A future Site Plan Control application will confirm the walking distances between entrances to the proposed apartment dwellings and stops #1042 and #1043.
- Street 1 will connect to Energy Street, and run generally on an east-west alignment from Energy Street to Street 3. Street 1 will have a width of 8.5m, which is wide enough to accommodate a travel lane in each direction and on-street parking on one side.
- Street 2 will connect to Hazeldean Road and Bliss Crescent, and run generally on a north-south alignment from Hazeldean Road to the southern intersection with Street 3, before curving 90 degrees to connect to Bliss Crescent. Street 2 will have a width of 8.5m. The connection to Hazeldean Road will not open as part of Phase 1.
- Street 3 will connect to Street 2 in two locations approximately 185m apart (measuring centre to centre), acting as a crescent loop on a curvilinear alignment. Street 3 will have a width of 8.5m.

- The proposed 8.5m width of each private roadway can accommodate the movements of heavy vehicles, such as fire trucks and garbage trucks. The volumes on the Phase 1 private roadways are projected to be 500 vehicles per day or less, which is consistent with public lanes per TAC's *Geometric Design Guide*. TAC suggests that no special facilities are required for pedestrians or cyclists on these types of roadways.

#### Boundary Streets

- Hazeldean Road meets the target transit level of service (TLOS) and truck level of service (TkLOS), and does not meet the target pedestrian level of service (PLOS) and bicycle level of service (BLOS).
- Hazeldean Road achieves the best-possible PLOS D by providing sidewalks with a minimum width of 2.0m and minimum boulevard width of 2.0m. To achieve the target PLOS C, a reduced operating speed of 60 km/h would be required.
- Hazeldean Road cannot achieve the target BLOS C without a reduced operating speed of 60 km/h or the implementation of off-road facilities, such as cycle tracks or a multi-use pathway. This is identified for the City's consideration.

#### Transportation Demand Management

- The proponent has agreed to consider the following measures at the sales centre for the low-density residential block:
  - Provide local area maps with walking/cycling access routes and key destinations;
  - Provide relevant transit schedules and route maps;
  - Provide a multimodal travel option information package.

#### Intersection MMLOS

- The results of the intersection MMLOS analysis can be summarized as follows:
  - No study area intersections meet the target PLOS;
  - No study area intersections meet the target BLOS;
  - Seven of the nine study area intersections meet the target TLOS;
  - Four of the nine study area intersections meet the target TkLOS.
- There is limited opportunity in improving the PLOS at each intersection without reducing the number of travel lanes or restricting turning movements. There is limited opportunity in improving the delay score for pedestrians without incurring major delays for vehicles.
- In general, fully protected intersections would be required to achieve the target BLOS, given the high operating speeds and volumes on Hazeldean Road or Terry Fox Drive. This is identified for the City's consideration.
- The east approach at Hazeldean Road/Mantra Street/Tillage Street and all approaches at Hazeldean Road/Terry Fox Drive do not meet the target TLOS. The City's 2031 RTTP Network Concept and 2031 Affordable Network identifies transit signal priority and queue jump lanes on Hazeldean Road from Stittsville Main Street to Eagleson Road. The City's 2031 RTTP Network Concept identifies transit signal priority on Terry Fox Drive from Hazeldean Road to Highway 417. If implemented, it is anticipated that transit delays on these approaches could improve to achieve the target TLOS.

- Select approaches at Hazeldean Road/Mantra Street/Tillage Street, Terry Fox Drive/Edgewater Street/Charlie Rogers Place, Terry Fox Drive/Tony Graham Rec Complex, Terry Fox Drive/Sobey's Access, and Terry Fox Drive/Winchester Drive/Halkirk Avenue do not meet the target TkLOS. No recommended modifications are identified.

#### Existing Traffic Operations

- The southbound through and eastbound left turn movements at Hazeldean Road/Terry Fox Drive operate at an Auto LOS E during the PM peak hour. All other movements operate at the target Auto LOS D or better during both peak hours.
- There are no average (i.e. 50<sup>th</sup>-percentile) queues that extend to upstream intersections. The northbound through movement at Hazeldean Road/Terry Fox Drive and eastbound through movement at Hazeldean Road/Edgewater Street have maximum (i.e. 95<sup>th</sup>-percentile) queue lengths that extend into upstream intersections during one or both peak hours.
- The maximum westbound through queue at Hazeldean Road/Mantra Street/Tillage Street is 166m, extending through the median break serving the existing golf centre on the subject site. The median break starts approximately 120m east of the westbound stop bar on Hazeldean Road at Mantra Street/Tillage Street. Queueing through this median break is also anticipated in all future conditions.

#### Background Traffic Operations

- By 2036, the northbound through movement at Hazeldean Road/Terry Fox Drive and the southbound left turn movement at Terry Fox Drive/Charlie Rogers Place/Edgewater Street operate over-capacity during the AM peak hour. The southbound left turn and westbound through movements at Hazeldean Road/Robert Grant Avenue and the northbound left turn, northbound through, southbound left turn, southbound through, eastbound left turn, and westbound through movements at Hazeldean Road/Terry Fox Drive operate over-capacity during the PM peak hour.
- Synchro does not identify signal timing adjustments at Hazeldean Road/Robert Grant Avenue and Hazeldean Road/Terry Fox Drive that allow all movements to operate at the target Auto LOS D. Traffic throughout the study area may be displaced or alleviated through a combination of increased use of non-auto modes of transportation, alternate travel times for drivers to make use of off-peak capacity, or alternate routes for travel.
- At Terry Fox Drive/Charlie Rogers Place/Edgewater Street, Synchro identifies that the provision of protected plus permitted southbound left turn phasing during the AM peak hour can be provided to improve the level of service for that movement, while maintaining acceptable operations for the northbound movements.

#### Total Traffic Operations

- Compared to the background traffic conditions, the addition of site-generated traffic is anticipated to have marginal impacts to traffic operations and queueing within the study area. The proposed access to Hazeldean Road operates acceptably during both peak hours.
- The proposed subdivision is recommended from a transportation perspective.



## 1.0 SCREENING

### 1.1 Introduction

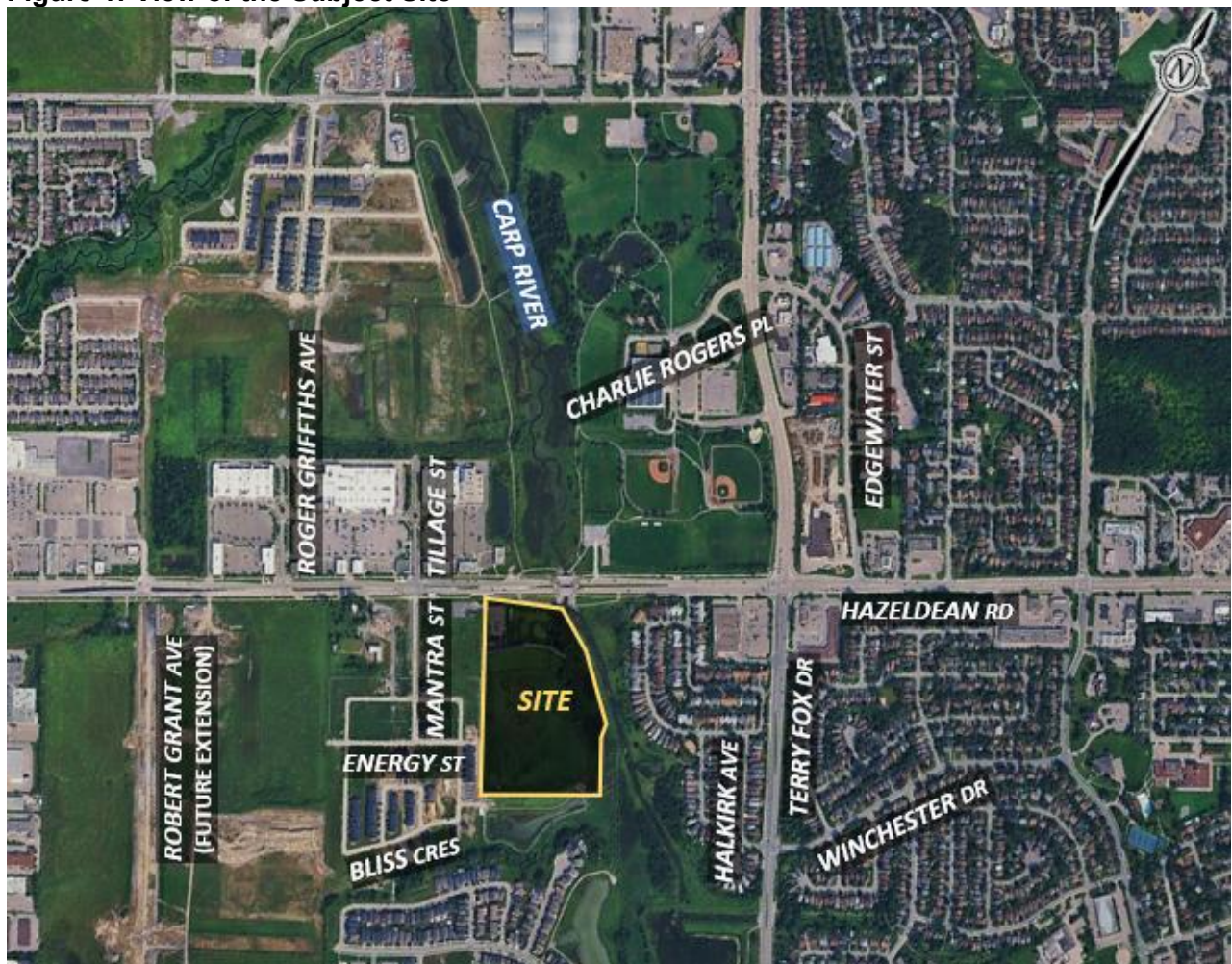
This Transportation Impact Assessment (TIA) has been prepared in support of Zoning By-Law Amendment and Draft Plan of Subdivision applications for the property located at 560 Hazeldean Road. The subject property is approximately 8.65 hectares in area, and is currently occupied by the Kevin Haime Golf Centre. The existing development includes one full-movement access to Hazeldean Road.

The subject site is surrounded by the following:

- Hazeldean Road, followed by commercial uses and the Carp River to the north,
- A stormwater facility, followed by residential uses to the south,
- The Carp River, followed by residential uses to the east, and
- Residential uses, followed by Mantra Street or Bliss Crescent to the west.

An aerial of the vicinity around the subject site is provided in **Figure 1**.

**Figure 1: View of the Subject Site**



## 1.2 Proposed Development

The proposed development is a subdivision including 50 single-detached homes, 48 townhomes, an apartment block, and three private roadways. The concept for the block includes 185 apartment dwellings within two six-storey buildings. A total of 196 parking spaces are proposed (i.e. two parking spaces per unit). Access to the proposed development is proposed via one driveway to Hazeldean Road, one driveway to Energy Street, and one driveway to Bliss Crescent.

The development is anticipated to be constructed in two phases. Phase 1 includes the low-density residential and access to Energy Street and Bliss Crescent, with a buildout year of 2029. Phase 2 includes the apartment block and access to Hazeldean Road, with a buildout year of 2031. A subsequent Site Plan Control application will be filed in support of the apartment block. The subject site is designated as 'Corridor – Mainstreet (Hazeldean Road)' and 'Evolving Neighbourhood' on Schedule B5 of the City of Ottawa's *Official Plan*. The implemented zoning for the property is 'Agricultural Zone' (AG[263r]), and the site is located within the Fernbank Community Design Plan (CDP) area. A rezoning is required to permit the proposed residential uses.

A copy of the concept plan is included in **Appendix A**.

## 1.3 Screening Form

The City's *Revised TIA Guidelines* identify three triggers for completing a TIA report, including trip generation, location, and safety. The criteria for each trigger are outlined in the City's TIA Screening Form, which is included in **Appendix B**. The trigger results are as follows:

- Trip Generation Trigger – The development is anticipated to generate over 60 peak hour person trips; further assessment is **required** based on this trigger.
- Location Triggers – The development proposes a new connection to a designated Transit Priority Corridor, and is located within a Design Priority Area (Hazeldean Road Mainstreet Corridor); further assessment is **required** based on this trigger.
- Safety Triggers – The proposed development proposes an access within 150m of an adjacent signal, within auxiliary lanes of an intersection, and makes use of an existing median break; further assessment is **required** based on this trigger.

## 2.0 SCOPING

### 2.1 Existing Conditions

#### 2.1.1 Roadways

All roadways within the study area fall under the jurisdiction of the City of Ottawa.

**Hazeldean Road** is an arterial roadway that generally runs on an east-west alignment between Spruce Ridge Road and Eagleson Road (continuing east as Robertson Road). Within the study area, Hazeldean Road has a posted speed limit of 60 km/h, and generally has a four-lane divided urban cross-section with concrete sidewalks on both sides of the roadway. Hazeldean Road includes bike lanes in both directions west of Edgewater Street. Hazeldean Road is a truck route, allowing full loads. Street parking is not permitted.

**Terry Fox Drive** is an arterial roadway that generally runs on a north-south alignment between Eagleson Road (continuing east as Hope Side Road) and March Road (continuing as a major collector roadway). Within the study area, Terry Fox Drive has a posted speed limit of 70 km/h, and generally has a four-lane divided urban cross-section. Concrete sidewalks are continuously provided on the east side of Terry Fox Drive within the study area, and concrete sidewalks or asphalt pathways are provided on the west side. Terry Fox includes bike lanes in both directions. Terry Fox Drive is a truck route, allowing full loads. Street parking is not permitted.

**Edgewater Street** is a collector roadway that runs on a curvilinear alignment between Hazeldean Road and Terry Fox Drive (continuing west as Charlie Rogers Place). Within the study area, Edgewater Street has an unposted regulatory speed limit of 50 km/h, and generally has a two-lane undivided rural cross-section that is urbanized within the proximity of Hazeldean Road and Terry Fox Drive. Limited sidewalks are provided on the outside of Edgewater Street within the proximity of Hazeldean Road and Terry Fox Drive. Edgewater Street is not a truck route. Street parking is permitted in select locations on both sides of the roadway.

**Winchester Drive** is a collector roadway that generally runs on an east-west alignment between Terry Fox Drive (continuing west as Halkirk Avenue) and Castlefrank Road. Within the study area, Winchester Drive has a posted speed limit of 40 km/h, and a two-lane undivided urban cross-section. A concrete sidewalk is continuously provided on the south side of the roadway. Painted edge lines are provided in both directions. Winchester Drive is not a truck route. Street parking is generally permitted.

**Roger Griffiths Avenue** is a local roadway that generally runs on a north-south alignment for a distance of approximately 230m north of Hazeldean Road. Roger Griffiths Avenue has also been constructed for a distance of approximately 375m south of Maple Grove Road, however the two sections are currently discontinuous. Within the study area, Roger Griffiths Avenue has an unposted regulatory speed limit of 50 km/h, and a two-lane divided urban cross-section. Concrete sidewalks are provided on both sides of the roadway. Roger Griffiths Avenue is not a truck route. Street parking is not permitted.

**Tillage Street** is a local roadway that generally runs on a north-south alignment for a distance of approximately 230m north of Hazeldean Road (continuing south of Hazeldean Road as Mantra Street). Within the study area, Tillage Street has an unposted regulatory speed limit of 50 km/h, and a two-lane divided urban cross-section. Concrete sidewalks are provided on both sides of the roadway. Tillage Street is not a truck route. Street parking is not permitted.

**Mantra Street** is a local roadway that is partially constructed, and generally runs on a north-south alignment between Energy Street and Hazeldean Road (continuing north as Tillage Street). Within the study area, Mantra Street is planned to have a two-lane, partially-divided urban cross-section, and is assumed to have a speed limit of 50 km/h. Concrete sidewalks are planned for both sides of the roadway. Mantra Street is not a truck route. Based on the width of Mantra Street, it is anticipated that street parking is/will be permitted on one side of the roadway.

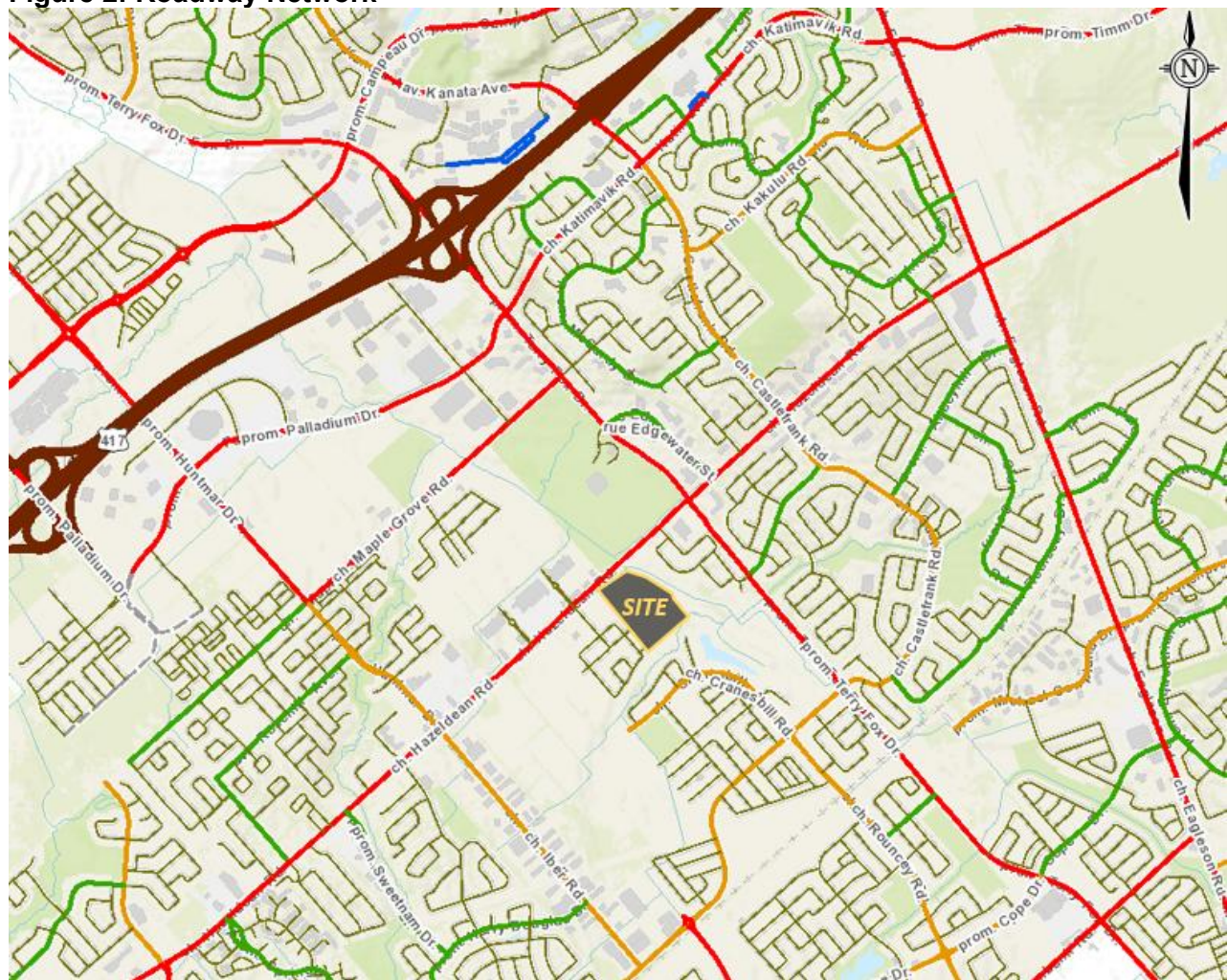


**Charlie Rogers Place** is a local roadway that generally runs on an east-west alignment for a distance of approximately 190m west of Terry Fox Drive (continuing east of Terry Fox Drive as Edgewater Street). Within the study area, Charlie Rogers Place has an unposted regulatory speed limit of 50 km/h, and a two-lane cross-section that is partially divided and urbanized from Terry Fox Drive to Ron Maslin Way, and undivided and rural west of Ron Maslin Way. An asphalt sidewalk is provided on the north side of the roadway. Charlie Rogers Place is not a truck route. Street parking is not permitted.

**Halkirk Avenue** is a local roadway that runs on a curvilinear alignment between Kincardine Drive and Terry Fox Drive (continuing east as Winchester Drive). Within the study area, Halkirk Avenue has an unposted regulatory speed limit of 50 km/h, and a two-lane undivided urban cross-section. No sidewalks are provided on Halkirk Avenue. Halkirk Avenue is not a truck route. Street parking is generally permitted.

The roadway network of the greater area surrounding the subject site is illustrated in **Figure 2**.

**Figure 2: Roadway Network**



## 2.1.2 Intersections

The following study area intersections are described based on existing conditions. At the time of writing this TIA, the intersection at Hazeldean Road/325m East of Iber Road is currently under construction, and will be Hazeldean Road/Robert Grant Avenue in future conditions. Further discussion of this intersection is included in Section 2.2.1.

### Hazeldean Road @ 325m East of Iber Road

- Signalized three-legged intersection
- North Approach (The Shoppes at Fairwinds): one left turn lane and one right turn lane
- East Approach (Hazeldean Road): two through lanes, one pocket bike lane, and one channelized right turn lane
- West Approach (Hazeldean Road): one left turn lane, two through lanes, and one bike lane
- Standard crosswalks on all approaches



### Hazeldean Road @ Roger Griffiths Avenue

- Signalized three-legged intersection
- North Approach (Roger Griffiths Avenue): two left turn lanes and one right turn lane
- East Approach (Hazeldean Road): two through lanes, one pocket bike lane, and one channelized right turn lane
- West Approach (Hazeldean Road): one left turn lane, two through lanes, and one bike lane
- Standard crosswalks on all approaches



### Hazeldean Road @ Mantra Street/Tillage Street

- Signalized four-legged intersection
- North Approach (Tillage Street): two left turn lanes and one through/right turn lane
- South Approach (Mantra Street): one left turn lane and one shared through/right turn lane
- East Approach (Hazeldean Road): one left turn lane, two through lanes, and one channelized right turn lane
- West Approach (Hazeldean Road): one left turn lane, one through lane, and one shared through/right turn lane
- Standard crosswalks on all approaches
- Bike boxes on north, south, and east approaches
- Protected intersection on southwest and southeast corners complete with crossside





Hazeldean Road @ Terry Fox Drive

- Signalized four-legged intersection
- North Approach (Terry Fox Drive):  
two left turn lanes, two through lanes, one pocket bike lane, and one channelized right turn lane
- South Approach (Terry Fox Drive):  
two left turn lanes, two through lanes, one pocket bike lane, and one channelized right turn lane
- East Approach (Hazeldean Road):  
two left turn lanes, two through lanes, one pocket bike lane, and one channelized right turn lane
- West Approach (Hazeldean Road):  
two left turn lanes, two through lanes, one pocket bike lane, and one channelized right turn lane
- Standard crosswalks on all approaches



Hazeldean Road @ Edgewater Street

- Signalized three-legged intersection
- North Approach (Edgewater Street):  
one left turn lane and one right turn lane
- East Approach (Hazeldean Road):  
one through lane and one shared through/right turn lane
- West Approach (Hazeldean Road):  
one left turn lane, two through lanes, and one bike lane
- Standard crosswalks on all approaches



Terry Fox Drive @ Edgewater Street/  
Charlie Rogers Place

- Signalized four-legged intersection
- North Approach (Terry Fox Drive):  
one left turn lane, two through lanes, one pocket bike lane, and one right turn lane
- South Approach (Terry Fox Drive):  
one left turn lane, one through lane, one shared through/right turn lane, and one bike lane
- East Approach (Edgewater Street):  
one left turn lane and one shared through/right turn lane
- West Approach (Charlie Rogers Place):  
one left turn lane and one shared through/right turn lane
- Standard crosswalks on all approaches



Terry Fox Drive @ Tony Graham Rec Complex

- Signalized four-legged intersection
- North Approach (Terry Fox Drive): one left turn lane, one through lane, one shared through/right turn lane, and one bike lane
- South Approach (Terry Fox Drive): one left turn lane, one through lane, one shared through/right turn lane, and one bike lane
- East Approach (access to 41 Edgewater): one left turn lane and one shared through/right turn lane
- West Approach (access to Tony Graham Rec Complex): one left turn lane and one shared through/right turn lane
- Standard crosswalks on all approaches



Terry Fox Drive @ Sobey's Access

- Signalized four-legged intersection
- North Approach (Terry Fox Drive): one left turn lane, one through lane, one shared through/right turn lane, and one bike lane
- South Approach (Terry Fox Drive): one left turn lane, two through lanes, one shared through/right turn lane, and one bike lane
- East Approach (access to 500 Hazeldean): one shared left turn/through lane and one channelized right turn lane
- West Approach (access to Sobey's): one shared left turn/through/right turn lane
- Standard crosswalks on all approaches



Terry Fox Drive @ Winchester Drive/Halkirk Avenue

- Signalized four-legged intersection
- North Approach (Terry Fox Drive): one left turn lane, two through lanes, one pocket bike lane, and one right turn lane
- South Approach (Terry Fox Drive): one left turn lane, one through lane, one shared through/right turn lane, and one bike lane
- East Approach (Winchester Drive): one left turn lane and one shared through/right turn lane
- West Approach (Halkirk Avenue): one left turn lane and one shared through/right turn lane
- Standard crosswalks on all approaches





### 2.1.3 Driveways

In accordance with the *Revised TIA Guidelines*, a review of the existing adjacent driveways along the boundary roads are provided as follows:

#### Hazeldean Road, north side

- One City maintenance entrance east of 5497 Hazeldean Road.

#### Hazeldean Road, south side

- No adjacent driveways.

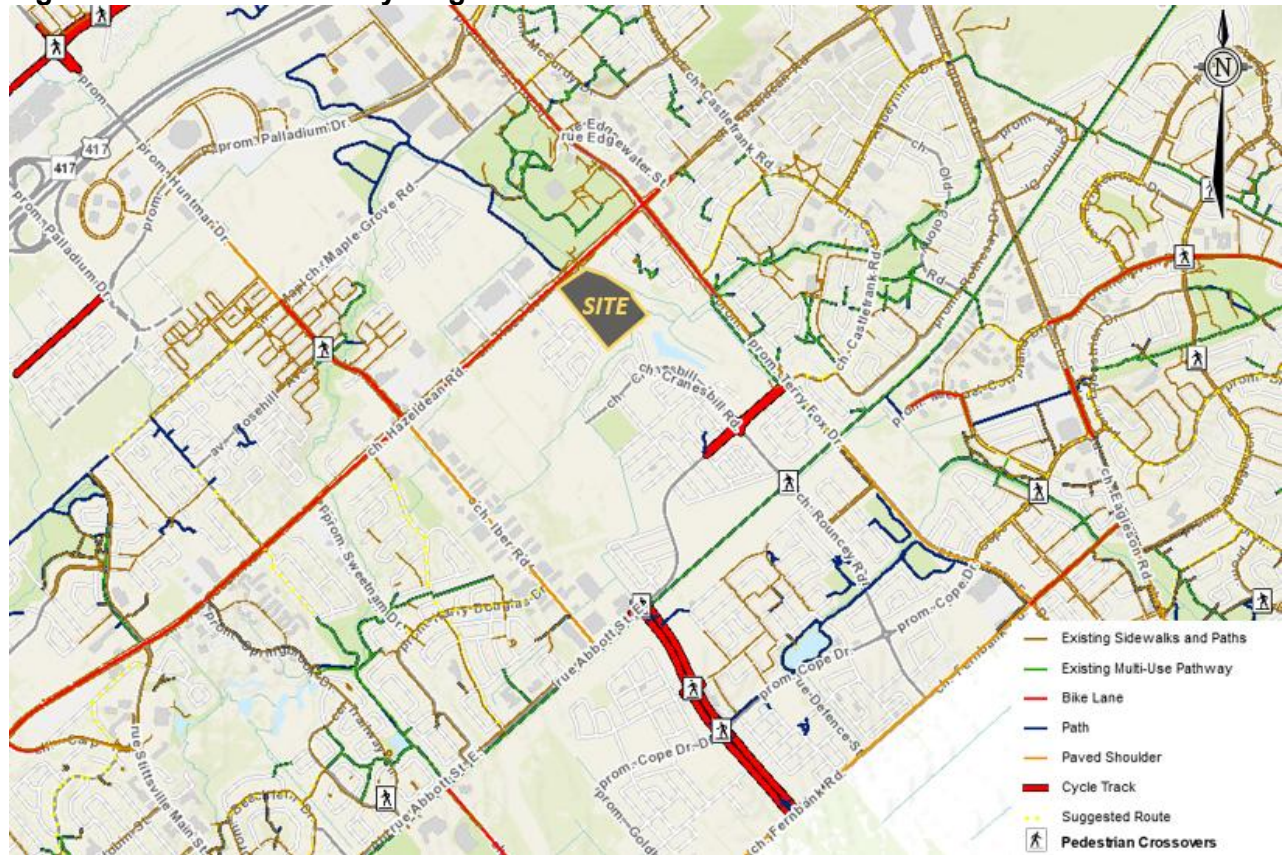
### 2.1.4 Pedestrian and Cycling Facilities

Within the study area, pedestrian facilities are currently provided on both sides of Hazeldean Road, Terry Fox Drive, Roger Griffiths Avenue, Tillage Street, on one side of Winchester Drive, Mantra Street, and Charlie Rogers Place. Pedestrian facilities are planned for both sides of Mantra Street.

Within the study area, no existing roadways are identified in the Crosstown Bikeway Network. The existing section and future extension of Robert Grant Avenue is identified in the Crosstown Bikeway Network. Bike lanes are provided on Hazeldean Road and Terry Fox Drive (north of Winchester Drive). The bike lanes on Terry Fox Drive transition to paved shoulders south of Winchester Drive.

The pedestrian and cycling network of the greater area surrounding the subject site is illustrated in **Figure 3**.

**Figure 3: Pedestrian and Cycling Network**





### 2.1.5 Area Traffic Management

Within the study area, there are no Area Traffic Management (ATM) studies that are in progress.

Area speed limit signs of 40 km/h, 'traffic calmed neighbourhood' signage, centreline flex posts and '40 KM/H' pavement markings have been implemented on Winchester Drive.

### 2.1.6 Transit

The locations of OC Transpo bus stops relevant to the subject site are described in **Table 1**, and are shown in **Figure 4**. A summary of the various routes which serve the study area is included in **Table 2**. Detailed route information and an excerpt from the OC Transpo System Map are included in **Appendix C**.

**Table 1: OC Transpo Transit Stops**

| Stop  | Location                                                  | Routes Served                   |
|-------|-----------------------------------------------------------|---------------------------------|
| #1042 | North side of Hazeldean Road,<br>west of Tillage Street   | 61, 301, 303                    |
| #1043 | South side of Hazeldean Road,<br>east of Mantra Street    | 61, 301, 303                    |
| #1201 | South side of Hazeldean Road,<br>east of Kincardine Drive | 61, 301, 303                    |
| #1217 | North side of Hazeldean Road,<br>west of Kincardine Drive | 61, 301, 303                    |
| #2308 | South side of Hazeldean Road,<br>west of Edgewater Street | 61, 68, 301, 303, 646, 667, 668 |
| #3504 | North side of Hazeldean Road,<br>east of Edgewater Street | 61, 68, 301, 303, 646           |
| #7920 | East side of Terry Fox Drive,<br>south of Hazeldean Road  | 67                              |
| #7921 | West side of Terry Fox Drive,<br>south of Hazeldean Road  | 67                              |

**Table 2: OC Transpo Route Information**

| Route      | From ↔ To                                                 | Frequency                                                                       |
|------------|-----------------------------------------------------------|---------------------------------------------------------------------------------|
| <b>61</b>  | Tunney's Pasture ↔<br>Stittsville / Terry Fox             | 30-minute headways;<br>all day and limited overnight service, seven days a week |
| <b>67</b>  | Terry Fox & Tunney's Pasture ↔<br>Cope                    | 30-minute headways;<br>all day service, Monday to Friday                        |
| <b>68</b>  | Baseline ↔<br>Terry Fox                                   | 15- to 30-minute headways;<br>all day service, seven days a week                |
| <b>301</b> | Bayshore / Carlingwood ↔<br>Richmond / Stittsville        | Free rural shopping route;<br>service is inbound in AM and outbound in PM       |
| <b>303</b> | Bayshore / Carlingwood ↔<br>Dunrobin / Carp / Stittsville | Free rural shopping route;<br>service is inbound in AM and outbound in PM       |
| <b>646</b> | Canterbury H.S. ↔<br>Terry Fox                            | School route; service at select times on school days only                       |
| <b>667</b> | Holy Trinity H.S. ↔<br>Hope Side                          | School route; service at select times on school days only                       |
| <b>668</b> | Holy Trinity H.S. ↔<br>Bridlewood                         | School route; service at select times on school days only                       |

Figure 4: OC Transpo Bus Stop Locations



### 2.1.7 Existing Traffic Volumes

Weekday traffic counts completed by the City of Ottawa or Novatech have been used to determine the existing pedestrian, cyclist, and vehicular traffic volumes at the study area intersections. These counts were completed on the dates listed below:

|                                                         |                  |
|---------------------------------------------------------|------------------|
| • Hazeldean Road/325m East of Iber Road                 | March 4, 2020    |
| • Hazeldean Road/Roger Griffiths Avenue                 | April 9, 2025    |
| • Hazeldean Road/Mantra Street/Tillage Street           | April 9, 2025    |
| • Hazeldean Road/Terry Fox Drive                        | October 29, 2024 |
| • Hazeldean Road/Edgewater Street                       | April 10, 2025   |
| • Terry Fox Drive/Edgewater Street/Charlie Rogers Place | April 10, 2025   |
| • Terry Fox Drive/Tony Graham Rec Complex               | January 30, 2024 |
| • Terry Fox Drive/Sobey's Access                        | April 10, 2025   |
| • Terry Fox Drive/Winchester Drive/Halkirk Avenue       | April 10, 2025   |

It is noted that active transportation volumes observed in the above traffic counts may be lower than typical conditions, as the counts were conducted outside of the warmest months. Since Hazeldean Road/325m East of Iber Road was counted prior to the COVID-19 pandemic, peak direction through volumes on Hazeldean Road have been balanced to be within 10% of volumes observed at Roger Griffiths Avenue. Based on the traffic count data, the average annual daily traffic (AADT) of Hazeldean Road across the subject site's frontage is approximately 25,170 vehicles per day (vpd). All traffic count data previously discussed are included in **Appendix D**. Vehicular traffic volumes and active transportation volumes within the study area are shown in **Figure 5** and **Figure 6**, respectively.

Figure 5: Existing Traffic Volumes

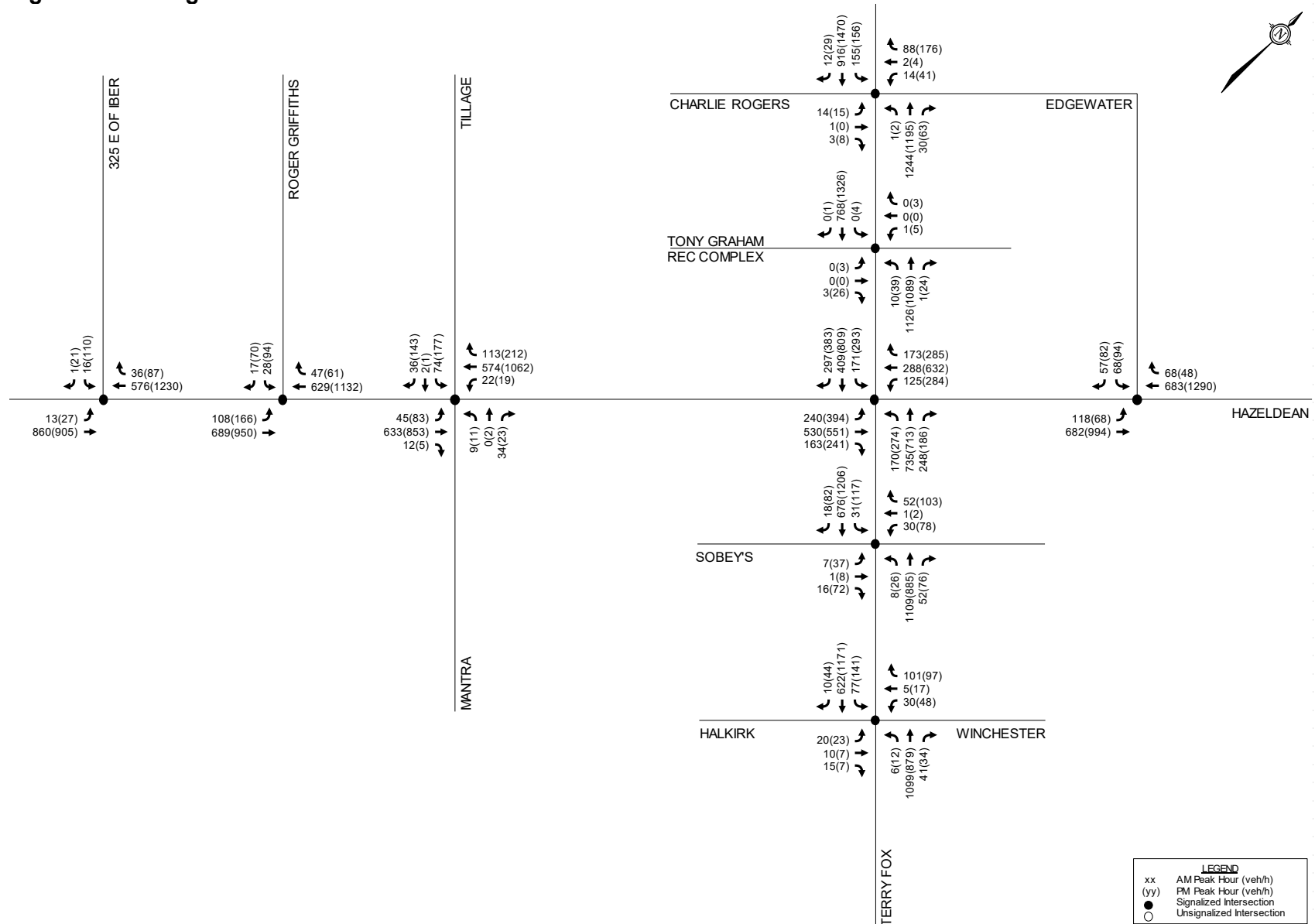
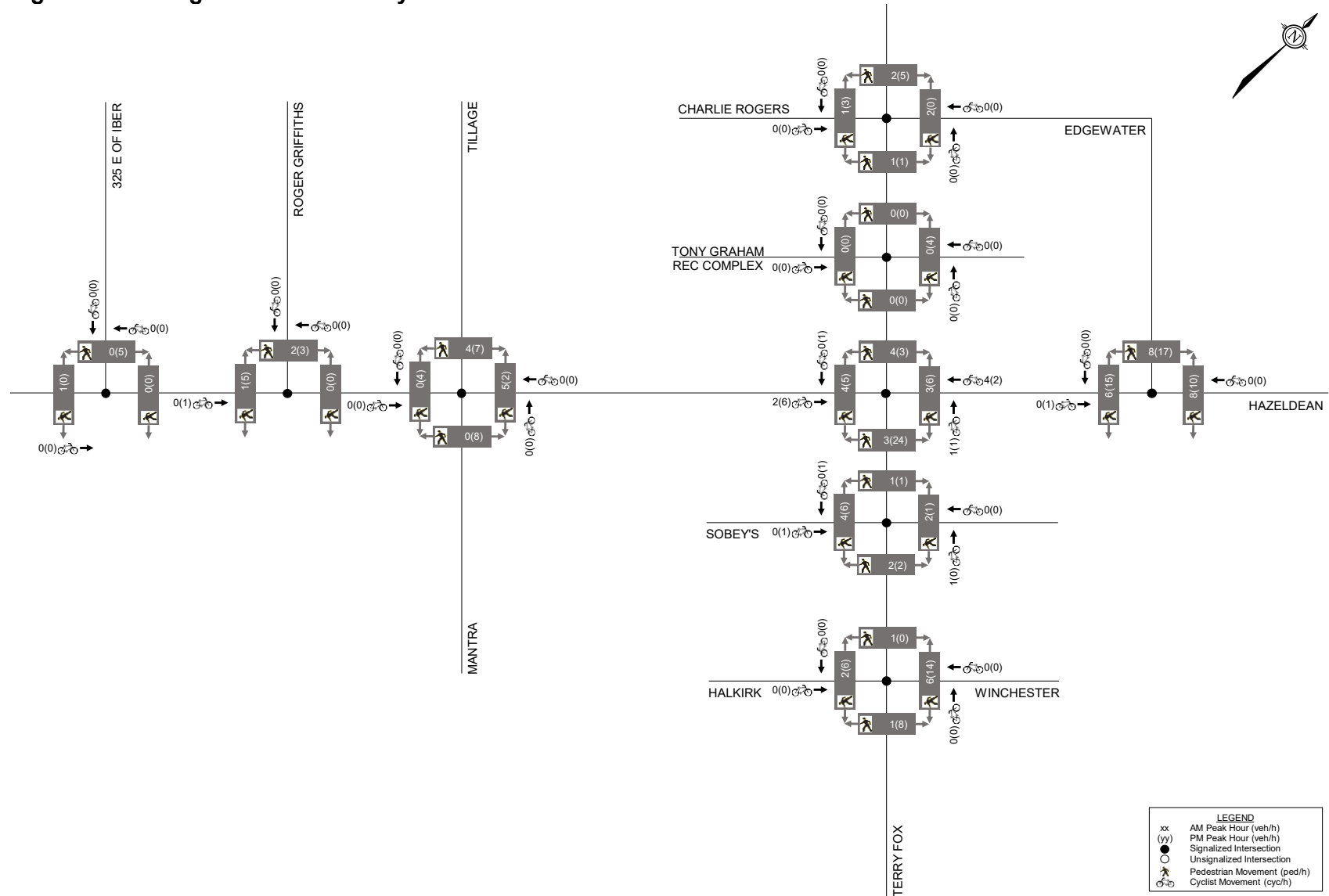


Figure 6: Existing Pedestrian and Cyclist Volumes



### 2.1.8 Collision Records

Historical collision data from the last five full years available was obtained from the City's Public Works and Service Department for the study area intersections and midblock segments. Copies of the collision summary reports are included in **Appendix E**.

The collision data has been evaluated to determine if there are any identifiable collision patterns, which are defined in the *Revised TIA Guidelines* as 'more than six collisions in five years' for any one movement. The number of collisions at each intersection from January 1, 2018 to December 31, 2022 is summarized in **Table 3**.

**Table 3: Reported Collisions**

| Location                                                     | Impact Types |          |           |              |                            | Total |
|--------------------------------------------------------------|--------------|----------|-----------|--------------|----------------------------|-------|
|                                                              | Angle        | Rear End | Sideswipe | Turning Mvmt | SMV <sup>(1)</sup> / Other |       |
| Intersections                                                |              |          |           |              |                            |       |
| Hazeldean Rd/<br>325m East of Iber Rd                        | 1            | 1        | -         | 1            | -                          | 3     |
| Hazeldean Rd/<br>Roger Griffiths Ave                         | 1            | 2        | 1         | 2            | 2                          | 8     |
| Hazeldean Rd/<br>Mantra St/Tillage St                        | 1            | 5        | 1         | 3            | 1                          | 11    |
| Hazeldean Rd/<br>Terry Fox Dr                                | 11           | 85       | 13        | 13           | 6                          | 128   |
| Hazeldean Rd/<br>Edgewater St                                | 4            | 6        | 2         | 3            | 3                          | 18    |
| Terry Fox Dr/<br>Edgewater St/Charlie Rogers Pl              | 7            | 13       | 6         | 13           | 1                          | 40    |
| Terry Fox Dr/<br>Tony Graham Rec Complex                     | -            | 1        | 1         | 1            | -                          | 3     |
| Terry Fox Dr/<br>Sobey's Access                              | 5            | 1        | 1         | 2            | 2                          | 11    |
| Terry Fox Dr/<br>Winchester Dr/Halkirk Ave                   | 3            | 12       | 1         | 4            | 1                          | 21    |
| Midblock Segments                                            |              |          |           |              |                            |       |
| Hazeldean Rd btwn 325m E of<br>Iber Rd & Roger Griffiths Ave | -            | 1        | -         | -            | -                          | 1     |
| Hazeldean Rd btwn<br>Roger Griffiths Ave & Mantra St         | -            | -        | 1         | -            | -                          | 1     |
| Hazeldean Rd btwn<br>Mantra St & Terry Fox Dr                | 5            | 4        | 2         | -            | -                          | 11    |
| Hazeldean Rd btwn<br>Terry Fox Dr & Edgewater St             | -            | 2        | 1         | -            | -                          | 3     |
| Terry Fox Dr btwn Edgewater St &<br>Tony Graham Rec Complex  | -            | 3        | 1         | -            | -                          | 4     |
| Terry Fox Dr btwn Tony Graham<br>Rec Complex & Hazeldean Rd  | -            | 1        | 2         | -            | -                          | 3     |
| Terry Fox Dr btwn<br>Hazeldean Rd & Sobey's Access           | -            | 2        | 3         | -            | -                          | 5     |
| Terry Fox Dr btwn<br>Sobey's Access & Winchester Dr          | -            | 3        | 1         | -            | -                          | 4     |

1. SMV = Single Motor Vehicle



*Hazeldean Road/325m East of Iber Road*

A total of three collisions were reported at this intersection over the last five years, consisting of one angle impact, one rear-end impact, and one turning movement impact. Two collisions resulted in injuries, but no collision caused fatalities. All three collisions (100%) occurred in poor driving conditions. No collisions involved pedestrians or cyclists.

*Hazeldean Road/Roger Griffiths Avenue*

A total of eight collisions were reported at this intersection over the last five years, consisting of one angle impact, two rear-end impacts, one sideswipe impact, two turning movement impacts, and two single vehicle/other impacts. Three collisions resulted in injuries, but no collision caused fatalities. Three of the eight collisions (38%) occurred in poor driving conditions. One collision involved a pedestrian and an eastbound left turning vehicle. No collisions involved cyclists.

*Hazeldean Road/Mantra Street/Tillage Street*

A total of 11 collisions were reported at this intersection over the last five years, consisting of one angle impact, five rear-end impacts, one sideswipe impact, three turning movement impacts, and one single vehicle/other impact. No collisions resulted in injuries or fatalities. Three of the 11 collisions (27%) occurred in poor driving conditions. One collision involved a pedestrian and a southbound right turning vehicle. No collisions involved cyclists.

*Hazeldean Road/Terry Fox Drive*

A total of 128 collisions were reported at this intersection over the last five years, consisting of 11 angle impacts, 85 rear-end impacts, 13 sideswipe impacts, 13 turning movement impacts, and six single vehicle/other impacts. Twenty collisions resulted in injuries, but no collision caused fatalities. Forty-one of the 128 collisions (32%) occurred in poor driving conditions. One collision involved a pedestrian and a southbound right turning vehicle. Two collisions involved cyclists (one angle impact involving a right turning cyclist and vehicle travelling through, and one rear-end impact involving a cyclist and vehicle travelling through).

Of the 11 angle impacts, three involved a northbound vehicle and an eastbound vehicle, one involved a northbound vehicle and a westbound vehicle, three involved a southbound vehicle and an eastbound vehicle, and four involved a southbound vehicle and a westbound vehicle. No one combination meets the threshold of a collision pattern.

Of the 85 rear-end impacts, 24 involved northbound vehicles (18 through incidents, six right turn incidents), 28 involved southbound vehicles (ten through incidents, 18 right turn incidents), 19 involved eastbound vehicles (four left turn incidents, ten through incidents, five right turn incidents), and 14 involved westbound vehicles (ten through incidents, four right turn incidents). Posted speed limits of 60 or 70 km/h and high traffic volumes are likely factors for the frequency of this type of collision. There are no apparent geometric factors to make rear-end impacts at any approach more likely.

Of the 13 sideswipe impacts, four involved northbound vehicles, three involved southbound vehicles, three involved eastbound vehicles, and three involved westbound vehicles. No one approach meets the threshold of a collision pattern.

Of the 13 turning movement impacts, seven involved a northbound vehicle and southbound vehicle (one northbound left turn and southbound right turn, three northbound through and southbound left turn, and three northbound right turn and southbound left turn), four involved multiple southbound vehicles (two southbound through and southbound left turn, one southbound through and southbound right turn, and one with two southbound right turns), and two involved an eastbound vehicle and westbound vehicle (one eastbound right turn and westbound left turn, and one westbound left turn and westbound U-turn). No one combination meets the threshold of a collision pattern.

Of the six single vehicle/other impacts, four involved a vehicle reversing into another vehicle facing the same direction (one at each approach). One involved a southbound right turning vehicle colliding with a pedestrian, and one involved a southbound vehicle impacting a pole (manoeuvre unknown). No one approach meets the threshold of a collision pattern.

#### Hazeldean Road/Edgewater Street

A total of 18 collisions were reported at this intersection over the last five years, consisting of four angle impacts, six rear-end impacts, two sideswipe impacts, three turning movement impacts, and three single vehicle/other impacts. Four collisions resulted in injuries, but no collision caused fatalities. Eight of the 18 collisions (44%) occurred in poor driving conditions. One collision involved a pedestrian and an eastbound left turning vehicle. No collisions involved cyclists.

#### Terry Fox Drive/Edgewater Street/Charlie Rogers Place

A total of 40 collisions were reported at this intersection over the last five years, consisting of seven angle impacts, 13 rear-end impacts, six sideswipe impacts, 13 turning movement impacts, and one single vehicle/other impact. Fourteen collisions resulted in injuries, but no collision caused fatalities. Ten of the 40 collisions (25%) occurred in poor driving conditions. No collisions involved pedestrians. One angle impact involved a right turning cyclist and vehicle travelling through.

Of the seven angle impacts, three involved a northbound vehicle and an eastbound vehicle, one involved a northbound vehicle and a westbound vehicle, two involved a southbound vehicle and an eastbound vehicle, one involved a southbound vehicle and a westbound vehicle, and one involved a southbound vehicle and a westbound bicycle. No one combination meets the threshold of a collision pattern.

Of the 13 rear-end impacts, seven involved northbound vehicles (all through incidents) and six involved southbound vehicles (two left turn incidents, four through incidents). The posted speed limit of 70 km/h and high traffic volumes on Terry Fox Drive are likely factors for the frequency of this type of collision. There are no apparent geometric factors to make rear-end impacts on Terry Fox Drive more likely.

Of the six sideswipe impacts, three involved northbound vehicles and three involved southbound vehicles. No one approach meets the threshold of a collision pattern.

Of the 13 turning movement impacts, 12 involved a northbound vehicle and southbound vehicle (three northbound left turn and southbound through, eight northbound through and southbound left turn, and one northbound through and southbound U-turn), and one involved an eastbound vehicle and westbound vehicle (one eastbound left turn and westbound right turn). The number of collisions including southbound left turns meets the threshold of a collision pattern. A protected plus permitted left turn phase is currently provided for northbound/southbound left turns during the PM peak period, and is fully permitted at all other times. Protected plus permitted left turn phasing during other periods of the day could be considered to mitigate this type of collision.

#### Terry Fox Drive/Tony Graham Rec Complex

A total of three collisions were reported at this intersection over the last five years, consisting of one rear-end impact, one sideswipe impact, and one turning movement impact. No collisions resulted in injuries or fatalities. None of the three collisions (0%) occurred in poor driving conditions. No collisions involved pedestrians or cyclists.

#### Terry Fox Drive/Sobey's Access

A total of 11 collisions were reported at this intersection over the last five years, consisting of five angle impacts, one rear-end impact, one sideswipe impact, two turning movement impacts, and two single vehicle/other impacts. Five collisions resulted in injuries, but no collision caused fatalities. Three of the 11 collisions (27%) occurred in poor driving conditions. Both single vehicle impacts involved a pedestrian and a westbound vehicle (one turning left and one turning right). No collisions involved cyclists.

#### Terry Fox Drive/Winchester Drive/Halkirk Avenue

A total of 21 collisions were reported at this intersection over the last five years, consisting of three angle impacts, 12 rear-end impacts, one sideswipe impact, four turning movement impacts, and one single vehicle/other impact. Five collisions resulted in injuries, but no collision caused fatalities. Eleven of the 21 collisions (52%) occurred in poor driving conditions. No collisions involved pedestrians. One angle impact involved a right turning cyclist and vehicle travelling through.

Of the 12 rear-end impacts, three involved northbound vehicles (all through incidents), seven involved southbound vehicles (all through incidents), one involved eastbound vehicles (a through incident), and one involved westbound vehicles (a through incident). The posted speed limit of 70 km/h and high traffic volumes on Terry Fox Drive are likely factors for the frequency of this type of collision. There are no apparent geometric factors to make rear-end impacts on Terry Fox Drive more likely.

#### Hazeldean Road between 325m of Iber Road & Roger Griffiths Avenue

One collision was reported along this segment over the last five years, which was a rear-end impact involving eastbound vehicles. The collision did not result in injuries or fatalities, and occurred in fair driving conditions. This collision did not involve pedestrians or cyclists.

#### Hazeldean Road between Roger Griffiths Avenue & Mantra Street/Tillage Street

One collision was reported along this segment over the last five years, which was a sideswipe impact involving eastbound vehicles. The collision did not result in injuries or fatalities, and occurred in fair driving conditions. This collision did not involve pedestrians or cyclists.

*Hazeldean Road between Mantra Street/Tillage Street & Terry Fox Drive*

A total of 11 collisions were reported along this segment over the last five years, consisting of five angle impacts, four rear-end impacts, and two sideswipe impacts. Of the 11 collisions, four occurred between Mantra Street/Tillage Street and Kincardine Drive, which is the section of Hazeldean Road that includes the subject site's frontage. The other seven occurred between Kincardine Drive and Terry Fox Drive.

Four collisions resulted in injuries, but no collision caused fatalities. Four of the 11 collisions (36%) occurred in poor driving conditions. No collisions involved pedestrians. One angle impact involved a right turning cyclist and vehicle travelling through.

*Hazeldean Road between Terry Fox Drive & Edgewater Street*

A total of three collisions were reported along this segment over the last five years, consisting of two rear-end impacts and one sideswipe impact. No collisions resulted in injuries or fatalities. None of the three collisions (0%) occurred in poor driving conditions. No collisions involved pedestrians or cyclists.

*Terry Fox Drive between Edgewater Street/Charlie Rogers Place & Tony Graham Rec Complex*

A total of four collisions were reported along this segment over the last five years, consisting of three rear-end impacts and one sideswipe impact. No collisions resulted in injuries or fatalities. None of the four collisions (0%) occurred in poor driving conditions. No collisions involved pedestrians or cyclists.

*Terry Fox Drive between Tony Graham Rec Complex & Hazeldean Road*

A total of three collisions were reported along this segment over the last five years, consisting of one rear-end impact and two sideswipe impacts. No collisions resulted in injuries or fatalities. One of the three collisions (33%) occurred in poor driving conditions. No collisions involved pedestrians or cyclists.

*Terry Fox Drive between Hazeldean Road & Sobeys Access*

A total of five collisions were reported along this segment over the last five years, consisting of two rear-end impacts and three sideswipe impacts. No collisions resulted in injuries or fatalities. Four of the five collisions (80%) occurred in poor driving conditions. No collisions involved pedestrians or cyclists.

*Terry Fox Drive between Sobeys Access & Winchester Drive/Halkirk Avenue*

A total of four collisions were reported along this segment over the last five years, consisting of three rear-end impacts and one sideswipe impact. Three collisions resulted in injuries, but no collisions caused fatalities. Two of the four collisions (50%) occurred in poor driving conditions. No collisions involved pedestrians or cyclists.

## 2.2 Planned Conditions

### 2.2.1 Planned Transportation Projects

The City's *2013 Transportation Master Plan (TMP)* identifies Hazeldean Road and Terry Fox Drive within its 2031 Rapid Transit and Transit Priority (RTTP) Network. Based on the 2031 Network Concept, the nearest corridors identified in the RTTP Network include Hazeldean Road and Terry Fox Drive north of Hazeldean Road (transit priority corridors with isolated measures), and Robert Grant Avenue (bus rapid transit with at-grade crossings south of Hazeldean Road and grade-separated crossings north of Hazeldean Road). Based on the 2031 Affordable Network, Hazeldean Road and Robert Grant Avenue are both transit priority corridors with isolated measures, while Terry Fox Drive has no transit priority designation.

The *2013 TMP* identifies the following study area projects within the 2031 Roadway Network Concept or 2031 Affordable Roadway Network. Based on the 2031 Network Concept, a widening of Terry Fox Drive from two lanes to four is identified between Winchester Road and Eagleson Road. The Environmental Assessment (EA) for this widening has been completed. The extension of Robert Grant Avenue to connect from Abbott Street East to Palladium Drive is identified in the 2031 Affordable Network. The section from Abbott Street East to Hazeldean Road is currently under construction. It is understood that the section from Hazeldean Road to Palladium Drive is scheduled for 2027-2028.

Within the study area, Robert Grant Avenue will intersect with Hazeldean Road at the existing study area intersection Hazeldean Road/325m East of Iber Road. The planned lane configuration at each approach is described below:

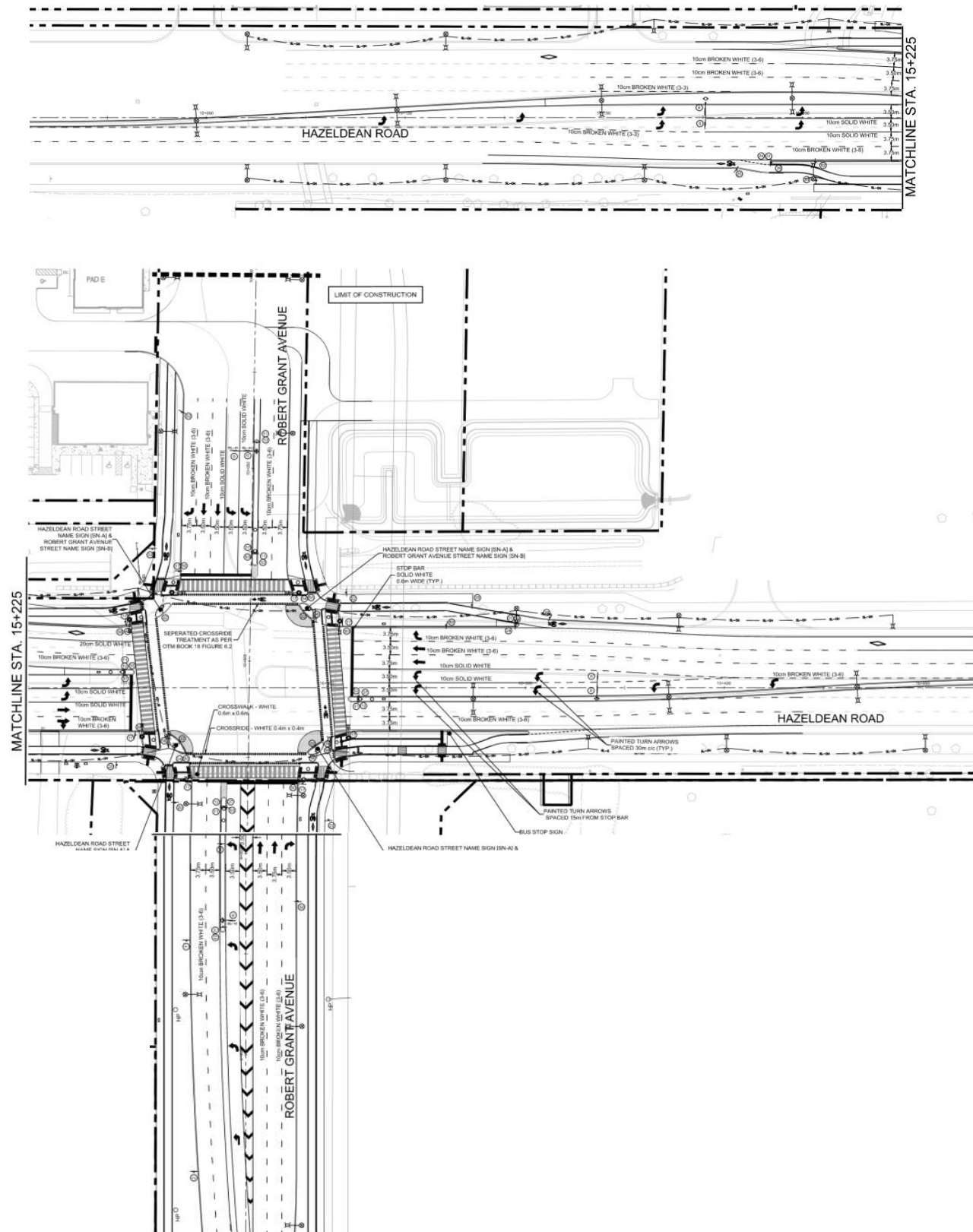
- North Approach (The Shoppes at Fairwinds / future Robert Grant Avenue extension): two left turn lanes, two through lanes, and one right turn lane
- South Approach (Robert Grant Avenue): one slotted left turn lane, two through lanes, and one right turn lane
- East Approach (Hazeldean Road): two left turn lanes, two through lanes, and one right turn lane
- West Approach (Hazeldean Road): two left turn lanes, one through lane, and one shared through/right turn lane
- Zebra-striped crosswalks and crossrides are planned on all approaches
- Cycle tracks are planned for all approaches
- Intersection will be fully protected

The planned Hazeldean Road/Robert Grant Avenue intersection is shown in **Figure 7**.

Approved by City Council in April 2023, the City's *TMP – Part 1* includes a list of upcoming active transportation projects, and supersedes the City's *2013 Ottawa Cycling Plan* and *2013 Ottawa Pedestrian Plan*. The *TMP – Part 1* identifies no pedestrian infrastructure projects within the vicinity of the subject site. The cycling infrastructure projects list identifies a pathway along the east side of the Carp River between Terry Fox Drive and Hazeldean Road (east of the site), and multi-use pathway (MUP) connections along Terry Fox Drive from Westphalian Avenue to Condado Crescent (south of the study area).



Figure 7: Planned Hazeldean Road/Robert Grant Avenue Intersection



## 2.2.2 Other Area Developments

Based on a review of the City's Development Application Search Tool, there are multiple other developments that are in proximity of the subject site, significant enough to include traffic projections that affect the study area, and are under construction, approved, or are in the approval process. These developments are summarized as follows.

### 16 Edgewater Street

A TIA was prepared by Novatech in July 2022, in support of a mixed-use development with 153 apartment dwellings, 23 townhomes, 458 m<sup>2</sup> of office space, and 294 m<sup>2</sup> of commercial space. The TIA estimated buildout to occur in 2022, however this application has not been approved at the time of writing.

### 21 Huntmar Drive

A TIA was prepared by D.J. Halpenny & Associates in June 2021, in support of a residential development with 344 apartment dwellings. The TIA estimated buildout to occur in 2024, however this application has not been approved at the time of writing.

### Trail View Subdivision (950 Terry Fox Drive)

A Transportation Impact Study (TIS) was prepared by Novatech in October 2014, in support of the Trail View subdivision consisting of 108 single-detached homes, 77 condo dwellings, and 60 apartment dwellings. A separate TIA in support of the apartment block was prepared by Novatech in May 2025. Some single-detached and condo dwellings have been built, and construction is ongoing. The TIA estimated buildout of the apartment block (i.e. the final phase of the subdivision) to occur in 2027.

### 5000 Robert Grant Avenue

A TIA was prepared by Parsons in March 2024, in support of a development consisting of 504 mid-rise or high-rise dwellings, and 2,185 ft<sup>2</sup> of retail space. The TIA estimated buildout to occur in 2025.

### Kizell Lands (5618 Hazeldean Road)

A TIA was prepared by Novatech in May 2020, in support of a subdivision consisting of 288 single-detached homes, 469 townhomes, 878 low-rise dwellings, 1,120 apartment dwellings, 351,334 ft<sup>2</sup> of retail space, a 580-student elementary school, and a 375-space park and ride. The TIA estimated buildout to occur in 2030.

### 5707 Hazeldean Road

A TIA was prepared by D.J. Halpenny & Associates in December 2019, in support of additional retail spaces at The Shoppes at Fairwinds. The gross floor area of the proposed additions total approximately 4,546 m<sup>2</sup>. The TIA estimated buildout to occur in 2021, however these additional retail pads have not been constructed at the time of writing.

A map indicating the approximate location of each development is included in **Figure 8**.

Figure 8: Other Area Developments



## 2.3 Study Area and Time Periods

The study area for this report includes the boundary roadway Hazeldean Road, as well as the following signalized intersections:

- Hazeldean Road/325m East of Iber Road (future Robert Grant Avenue);
- Hazeldean Road/Roger Griffiths Avenue;
- Hazeldean Road/Mantra Street/Tillage Street;
- Hazeldean Road/Terry Fox Drive;
- Hazeldean Road/Edgewater Street;
- Terry Fox Drive/Edgewater Street/Charlie Rogers Place;
- Terry Fox Drive/Tony Graham Rec Complex;
- Terry Fox Drive/Sobey's Access;
- Terry Fox Drive/Winchester Drive/Halkirk Avenue.

The selected time periods for this report are the weekday AM and PM peak hours, as they represent the 'worst case' combination of site generated traffic and adjacent street traffic. The Phase 1 buildout year 2029, Phase 2 buildout year 2031, and horizon year 2036 have been considered.

## 2.4 Access Design

Three accesses are proposed as part of the development, with one driveway each to Hazeldean Road, Energy Street, and Bliss Crescent. The driveway to Hazeldean Road will be part of Phase 2, and is proposed in approximately the same location as the existing driveway serving the golf centre.

The proposed accesses have been evaluated using the relevant provisions of the City's *Private Approach By-Law* (PABL) and the Transportation Association of Canada (TAC)'s *Geometric Design Guide for Canadian Roads*.

Section 25(1)(c) of the PABL identifies a maximum width requirement of 9m for any two-way private approach. The proposed accesses are each approximately 8.5m in width, meeting this requirement.

Section 25(1)(m) of the PABL identifies minimum distances between a private approach and the nearest intersecting street line, for sites that abut or are within 46m of an arterial or major collector roadway. For residential developments with more than 300 parking spaces, the minimum distance is 60m (measuring nearest edge to intersecting ROW). TAC's *Geometric Design Guide* identifies a minimum corner clearance of 70m (measuring nearest edge to nearest edge). The western edge of the proposed access to Hazeldean Road is approximately 137m from the ROW of Mantra Street, and approximately 141 from the nearest edge of Mantra Street. Therefore, these requirements are met.

Section 25(1)(p) of the PABL identifies a minimum separation requirement of 3m between a private approach and the nearest property line. The proposed access to Hazeldean Road is approximately 5m at the ROW of Hazeldean Road, meeting this requirement. The proposed accesses to Energy Street and Bliss Crescent will connect to the existing roadway blocks that have been constructed as part of the adjacent subdivision.

Section 25(1)(u) of the PABL identifies a requirement that any private approach serving a parking area with more than 50 parking spaces shall not have a grade exceeding 2% for the first 9m inside the property line. The grade of each proposed access will be confirmed as the concept plan is finalized.

A review of stopping sight distance (SSD) and intersection sight distance (ISD) requirements at the proposed accesses has been conducted, in accordance with the minimum requirements outlined in TAC's *Geometric Design Guide*. For the purposes of this review, a design speed of 70 km/h has been assumed for Hazeldean Road (i.e. 10 km/h greater than the posted speed limit of 60 km/h), and a design speed of 50 km/h has been assumed for Energy Street and Bliss Crescent. Therefore, TAC outlines the following SSD and ISD requirements:

- SSD
  - 105m required for Hazeldean Road;
  - 65m required for Energy Street/Bliss Crescent.
- ISD, looking right to turn left out of access
  - 150m desired for Hazeldean Road;
  - 105m desired for Energy Street/Bliss Crescent.
- ISD, looking left to turn right out of access
  - 130m desired for Hazeldean Road;
  - 95m desired for Energy Street/Bliss Crescent.

Hazeldean Road is a generally straight roadway that has a minor vertical crest east of the proposed development (i.e. at the bridge crossing the Carp River). There are clear sightlines to the crest of the bridge crossing the Carp River to the east (approximately 160m from the access location) and clear sightlines to the intersections with Mantra Street/Tillage Street and Roger Griffiths Avenue to the west. Therefore, the minimum required SSD and desired ISD are provided at the proposed access to Hazeldean Road.

The proposed accesses to Energy Street and Bliss Crescent will connect to the existing roadway blocks that were constructed as part of the adjacent subdivision. At Energy Street, it is anticipated that the required SSD can be provided in both directions, and the desired ISD can be provided for right turns. It is anticipated that the desired ISD for left turns is not provided, based on the 90-degree northeast corner of Bliss Crescent, however the curvature is tight enough that the operating speed is anticipated to be far slower than 50 km/h. Therefore, no concerns are identified.

At Bliss Crescent, it is anticipated that the required SSD can be provided for drivers approaching from the north, and the desired ISD can be provided for left turns. It is anticipated that the required SSD for drivers approaching from the south and the desired ISD for right turns is not provided, based on the 90-degree southeast corner of Bliss Crescent. However, the curvature is tight enough that the operating speed is anticipated to be far slower than 50 km/h. Approximately 40m of SSD is provided, which is acceptable for a design speed of approximately 36 km/h. Therefore, no concerns are identified.

TAC's *Geometric Design Guide* outlines a minimum clear throat length requirement for accesses serving apartments. For arterial accesses serving over 200 units, the *Geometric Design Guide* identifies a minimum clear throat length of 40m. This requirement can be met, as the apartment block has an approximate depth of 115m. The clear throat requirements for the apartment block can be reviewed further as part of the subsequent Site Plan Control application, when more details are known.



## 2.5 Development-Generated Travel Demand

### 2.5.1 Trip Generation

The number of peak hour person trips generated by the proposed development has been estimated using the *TRANS Trip Generation Manual*, which present peak period trip generation rates and mode shares for different types of housing for the AM and PM peak periods. The data is divided into trip generation rates and mode shares for Single-Family Detached Housing, Low-Rise Multifamily Housing (one or two storeys), and High-Rise Multifamily Housing (three or more storeys). The process of converting the trip generation estimates from peak period to peak hour is shown below. Traffic generated by the existing golf centre has not been deducted, as the golf centre is not open year-round.

The *TRANS Trip Generation Manual* identifies the subject site as being located within the Kanata-Stittsville district, which has the following observed mode shares during the peak periods.

**Table 4: Kanata-Stittsville Residential Mode Shares**

| Mode           | Single-Family Detached |         | Low-Rise Multifamily |         | High-Rise Multifamily |         |
|----------------|------------------------|---------|----------------------|---------|-----------------------|---------|
|                | AM Peak                | PM Peak | AM Peak              | PM Peak | AM Peak               | PM Peak |
| Auto Driver    | 52%                    | 56%     | 52%                  | 58%     | 43%                   | 55%     |
| Auto Passenger | 15%                    | 19%     | 14%                  | 17%     | 26%                   | 19%     |
| Transit        | 20%                    | 14%     | 22%                  | 17%     | 28%                   | 21%     |
| Cyclist        | 1%                     | 1%      | 0%                   | 0%      | 0%                    | 0%      |
| Pedestrian     | 12%                    | 9%      | 11%                  | 8%      | 4%                    | 5%      |

The mode shares for this proposed development are assumed to be equal during both peak hours, and generally follow the mode shares observed for the Kanata-Stittsville district. Therefore, the assumed mode shares of the low-density homes and apartment block is summarized as follows:

- Auto Driver: 55% for single-family/low-rise multifamily, 50% for apartments;
- Auto Passenger: 20% for single-family/low-rise multifamily, 20% for apartments;
- Transit: 15% for single-family/low-rise multifamily, 25% for apartments;
- Cyclist: 0% for single-family/low-rise multifamily, 0% for apartments;
- Pedestrian: 10% for single-family/low-rise multifamily, 5% for apartments.

The process of converting the trip generation estimates from peak period to peak hour is shown in the following tables. The estimated number of person trips generated by the proposed development during the AM and PM peak periods are shown in **Table 5**. A breakdown of these trips by mode share is shown in **Table 6**.



**Table 5: Proposed Residential – Peak Period Trip Generation**

| Land Use                       | TRANS Rate           | Units | AM Peak Period (ppp <sup>(1)</sup> ) |            |            | PM Peak Period (ppp) |            |            |
|--------------------------------|----------------------|-------|--------------------------------------|------------|------------|----------------------|------------|------------|
|                                |                      |       | IN                                   | OUT        | TOT        | IN                   | OUT        | TOT        |
| Single-Family Detached Housing | AM: 2.05<br>PM: 2.48 | 50    | 31                                   | 72         | 103        | 77                   | 47         | 124        |
| Low-Rise Multifamily Housing   | AM: 1.35<br>PM: 1.58 | 48    | 20                                   | 46         | 66         | 43                   | 33         | 76         |
| High-Rise Multifamily Housing  | AM: 0.80<br>PM: 0.90 | 185   | 46                                   | 102        | 148        | 97                   | 70         | 167        |
| <b>Total</b>                   |                      |       | <b>97</b>                            | <b>220</b> | <b>317</b> | <b>217</b>           | <b>150</b> | <b>367</b> |

1. ppp: Person Trips per Peak Period

**Table 6: Proposed Residential – Peak Period Trips by Mode Share**

| Travel Mode                |     | Mode Share | AM Peak Period |     |     | PM Peak Period |     |     |
|----------------------------|-----|------------|----------------|-----|-----|----------------|-----|-----|
|                            |     |            | IN             | OUT | TOT | IN             | OUT | TOT |
| Single-Family Person Trips |     |            | 31             | 72  | 103 | 77             | 47  | 124 |
| Auto Driver                | 55% | 17         | 40             | 57  | 42  | 26             | 68  |     |
| Auto Passenger             | 20% | 6          | 15             | 21  | 15  | 10             | 25  |     |
| Transit                    | 15% | 5          | 10             | 15  | 12  | 7              | 19  |     |
| Cyclist                    | 0%  | -          | -              | 0   | -   | -              | 0   |     |
| Pedestrian                 | 10% | 3          | 7              | 10  | 8   | 4              | 12  |     |
| Low-Rise Person Trips      |     |            | 20             | 46  | 66  | 43             | 33  | 76  |
| Auto Driver                | 55% | 11         | 25             | 36  | 24  | 18             | 42  |     |
| Auto Passenger             | 20% | 4          | 9              | 13  | 9   | 6              | 15  |     |
| Transit                    | 15% | 3          | 7              | 10  | 6   | 5              | 11  |     |
| Cyclist                    | 0%  | -          | -              | 0   | -   | -              | 0   |     |
| Pedestrian                 | 10% | 2          | 5              | 7   | 4   | 4              | 8   |     |
| High-Rise Person Trips     |     |            | 46             | 102 | 148 | 97             | 70  | 167 |
| Auto Driver                | 50% | 23         | 51             | 74  | 48  | 35             | 83  |     |
| Auto Passenger             | 20% | 9          | 21             | 30  | 20  | 14             | 34  |     |
| Transit                    | 25% | 12         | 25             | 37  | 24  | 18             | 42  |     |
| Cyclist                    | 0%  | -          | -              | 0   | -   | -              | 0   |     |
| Pedestrian                 | 5%  | 2          | 5              | 7   | 5   | 3              | 8   |     |
| Total Person Trips         |     |            | 97             | 220 | 317 | 217            | 150 | 367 |
| Auto Driver                |     |            | 51             | 116 | 167 | 114            | 79  | 193 |
| Auto Passenger             |     |            | 19             | 45  | 64  | 44             | 30  | 74  |
| Transit                    |     |            | 20             | 42  | 62  | 42             | 30  | 72  |
| Cyclist                    |     |            | -              | -   | 0   | -              | -   | 0   |
| Pedestrian                 |     |            | 7              | 17  | 24  | 17             | 11  | 28  |

Table 4 of the *TRANS Trip Generation Manual* includes adjustment factors to convert the estimated number of trips generated for each mode from peak period to peak hour. A breakdown of the peak hour trips by mode is shown in **Table 7**.

Table 7: Proposed Residential – Peak Hour Trips by Mode Share

| Travel Mode                       | Adj. Factor |      | AM Peak Hour |            |            | PM Peak Hour |           |            |
|-----------------------------------|-------------|------|--------------|------------|------------|--------------|-----------|------------|
|                                   | AM          | PM   | IN           | OUT        | TOT        | IN           | OUT       | TOT        |
| Auto Driver                       | 0.48        | 0.44 | 8            | 19         | 27         | 19           | 11        | 30         |
| Auto Passenger                    | 0.48        | 0.44 | 3            | 7          | 10         | 7            | 4         | 11         |
| Transit                           | 0.55        | 0.47 | 3            | 6          | 9          | 5            | 3         | 8          |
| Cyclist                           | 0.58        | 0.48 | -            | -          | 0          | -            | -         | 0          |
| Pedestrian                        | 0.58        | 0.52 | 2            | 4          | 6          | 4            | 2         | 6          |
| <b>Single-Family Person Trips</b> |             |      | <b>16</b>    | <b>36</b>  | <b>52</b>  | <b>35</b>    | <b>20</b> | <b>55</b>  |
| Auto Driver                       | 0.48        | 0.44 | 5            | 12         | 17         | 10           | 8         | 18         |
| Auto Passenger                    | 0.48        | 0.44 | 2            | 4          | 6          | 4            | 3         | 7          |
| Transit                           | 0.55        | 0.47 | 2            | 4          | 6          | 3            | 2         | 5          |
| Cyclist                           | 0.58        | 0.48 | -            | -          | 0          | -            | -         | 0          |
| Pedestrian                        | 0.58        | 0.52 | 1            | 3          | 4          | 2            | 2         | 4          |
| <b>Low-Rise Person Trips</b>      |             |      | <b>10</b>    | <b>23</b>  | <b>33</b>  | <b>19</b>    | <b>15</b> | <b>34</b>  |
| Auto Driver                       | 0.48        | 0.44 | 11           | 24         | 35         | 21           | 15        | 36         |
| Auto Passenger                    | 0.48        | 0.44 | 4            | 10         | 14         | 9            | 6         | 15         |
| Transit                           | 0.55        | 0.47 | 6            | 14         | 20         | 11           | 8         | 19         |
| Cyclist                           | 0.58        | 0.48 | -            | -          | 0          | -            | -         | 0          |
| Pedestrian                        | 0.58        | 0.52 | 1            | 3          | 4          | 3            | 2         | 5          |
| <b>High-Rise Person Trips</b>     |             |      | <b>22</b>    | <b>51</b>  | <b>73</b>  | <b>44</b>    | <b>31</b> | <b>75</b>  |
| Auto Driver (Total)               |             |      | 24           | 55         | 79         | 50           | 34        | 84         |
| Auto Passenger (Total)            |             |      | 9            | 21         | 30         | 20           | 13        | 33         |
| Transit (Total)                   |             |      | 11           | 24         | 35         | 19           | 13        | 32         |
| Cyclist (Total)                   |             |      | -            | -          | 0          | -            | -         | 0          |
| Pedestrian (Total)                |             |      | 4            | 10         | 14         | 9            | 6         | 15         |
| <b>Total Person Trips</b>         |             |      | <b>48</b>    | <b>110</b> | <b>158</b> | <b>98</b>    | <b>66</b> | <b>164</b> |

From the previous table, the proposed development is estimated to generate 158 person trips (including 79 vehicle trips) during the AM peak hour, and 164 person trips (including 84 vehicle trips) during the PM peak hour.

### 2.5.2 Trip Distribution

The assumed distribution of trips generated by the proposed development is based on the typical commuter patterns. For residential trips, this is considered as outbound during the AM peak hour and inbound during the PM peak hour. As the extension of Robert Grant Avenue to Palladium Drive will be completed by the time the proposed development is built out, a percentage of site-generated trips have been assigned to/from the north and south via Robert Grant Avenue. The distribution can be summarized as follows.

- 35% to/from the north via Terry Fox Drive;
- 25% to/from the north via Robert Grant Avenue;
- 10% to/from the south via Terry Fox Drive;
- 5% to/from the south via Robert Grant Avenue;
- 20% to/from the east via Hazeldean Road;
- 5% to/from the west via Hazeldean Road.

### 2.5.3 Trip Assignment

#### Single-Family/Low-Rise Multifamily Trip Assignment

For the period where only Phase 1 has been constructed, trips generated by those homes have been assigned to the proposed accesses to Energy Street or Bliss Crescent. All trips to/from the south via Robert Grant Avenue are assumed to not travel on Hazeldean Road (connecting to Energy Street directly). All other trips are assumed to use the Hazeldean Road/Mantra Street/Tillage Street intersection to enter and exit the site.

After full buildout, trips generated by the single-family/low-rise multifamily homes have been split between all proposed accesses. All trips to/from the north/south via Terry Fox Drive and east via Hazeldean Road are assumed to use the Hazeldean Road access. All trips to/from the south via Robert Grant Avenue are assumed to use the Energy Street or Bliss Crescent access, and will not travel on Hazeldean Road. All trips to/from the north via Robert Grant Avenue and west via Hazeldean Road are assumed to also use the Energy Street or Bliss Crescent accesses, but will travel on Hazeldean Road to Mantra Street.

#### Apartment Trip Assignment

All trips generated by the apartments have been assigned to the proposed Hazeldean Road access. Trips to/from the south via Robert Grant Avenue are assumed to travel on Hazeldean Road, and will not travel on Energy Street or Mantra Street.

Based on the above, the distribution of site-generated traffic volumes to the study area intersections are shown in the following figures:

- Trips generated by the single-family/low-rise multifamily homes during Phase 1 is shown in **Figure 9**;
- Trips generated by the single-family/low-rise multifamily homes after full buildout is shown in **Figure 10**;
- Trips generated by the apartment block after full buildout is shown in **Figure 11**.

Figure 9: Site-Generated Traffic Volumes (Low-Density Homes, Phase 1)

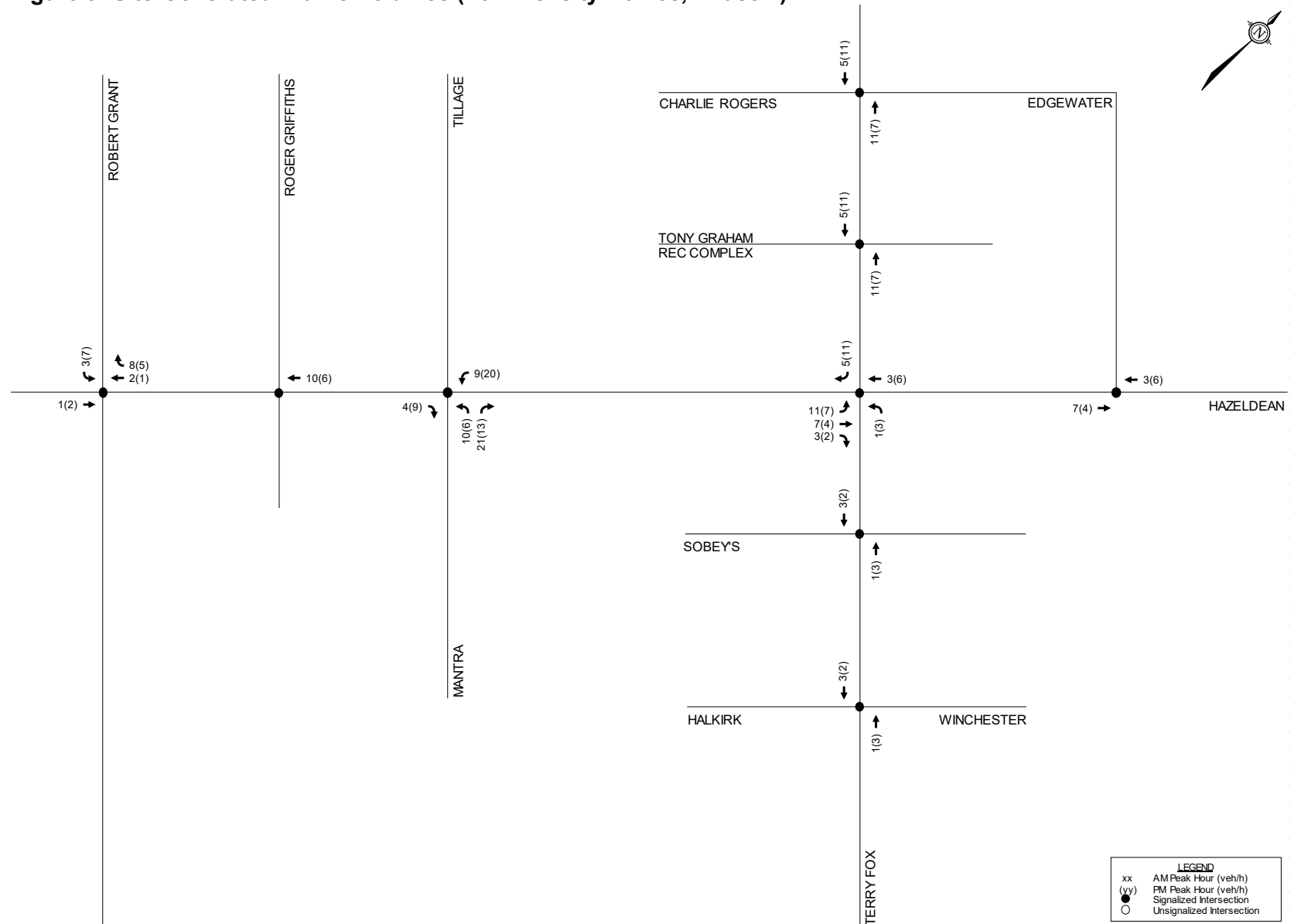


Figure 10: Site-Generated Traffic Volumes (Low-Density Homes, Full Buildout)

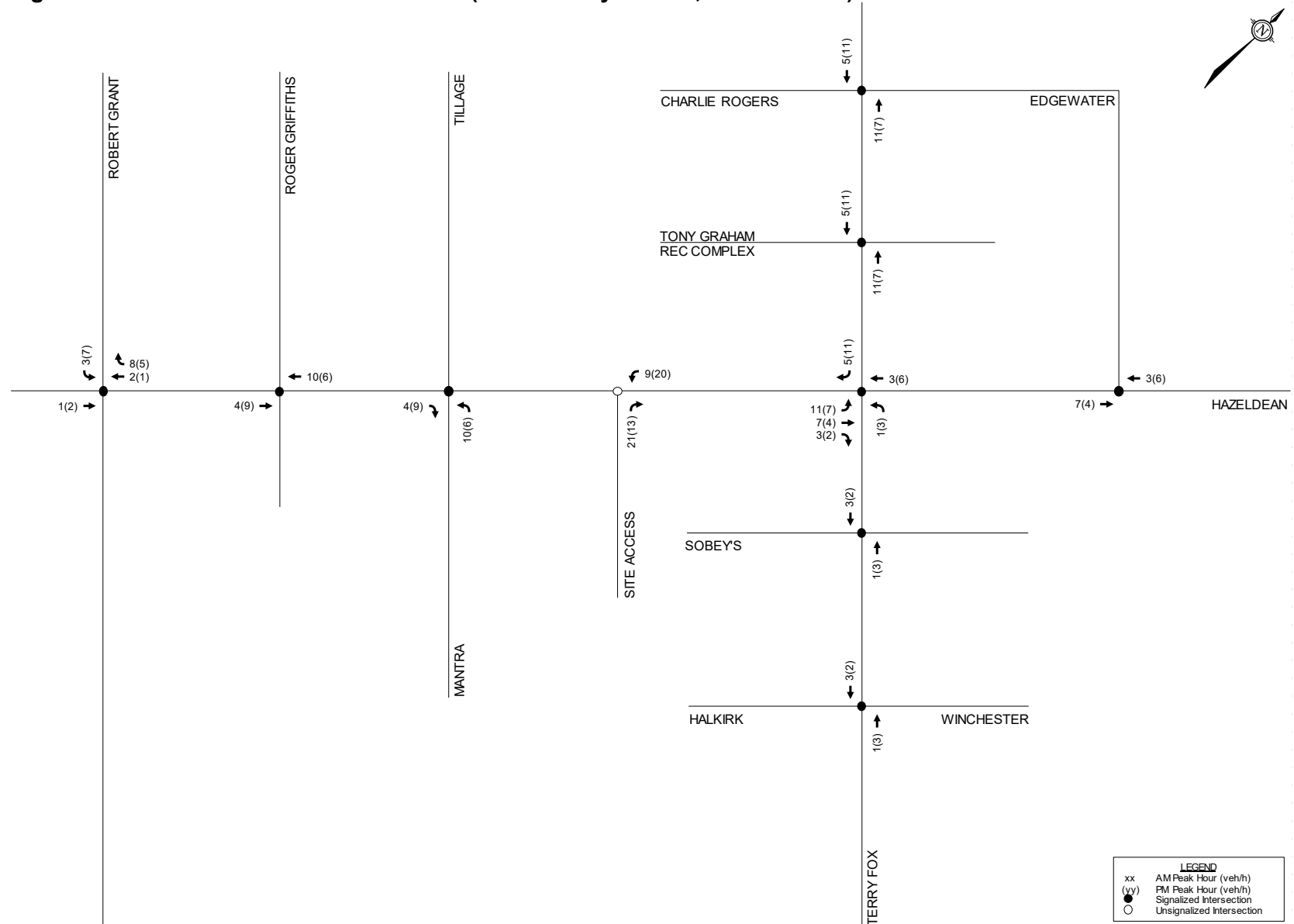
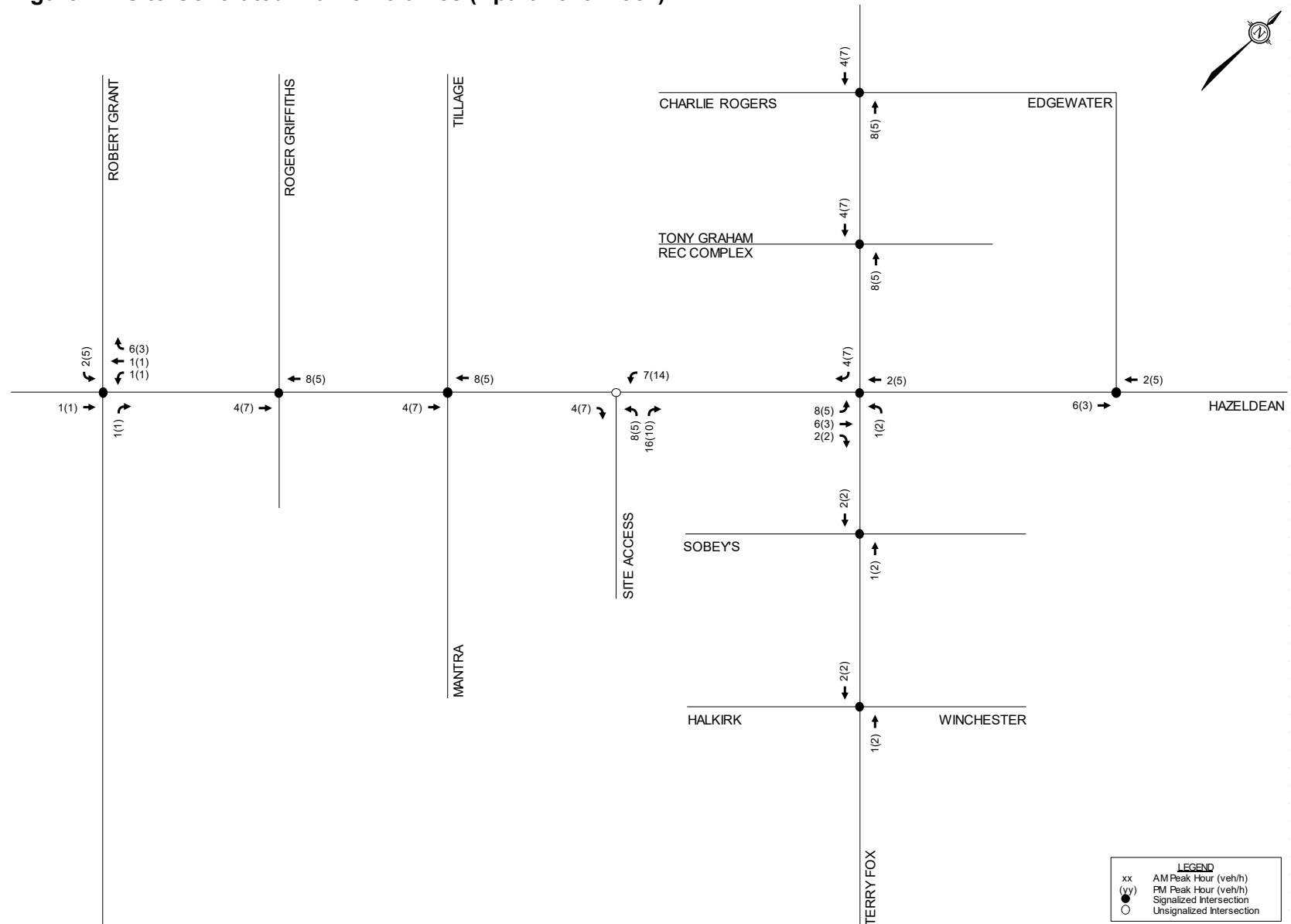




Figure 11: Site-Generated Traffic Volumes (Apartment Block)



## 2.6 Exemptions Review

This module reviews possible exemptions from the final TIA, as outlined in the *Revised TIA Guidelines*. The applicable exemptions for this site are shown in **Table 8**.

**Table 8: TIA Exemptions**

| Module                                      | Element                                       | Exemption Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Status     |
|---------------------------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>4.1</b><br>Development Design            | <b>4.1.2</b><br>Circulation and Access        | <ul style="list-style-type: none"> <li>Required for site plan control and zoning by-law amendment applications</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Not Exempt |
|                                             | <b>4.1.3</b><br>New Street Networks           | <ul style="list-style-type: none"> <li>Required for draft plan of subdivision applications</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Not Exempt |
| <b>4.2</b><br>Parking                       | <i>All elements</i>                           | <ul style="list-style-type: none"> <li>Required for site plan control and zoning by-law amendment applications</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Not Exempt |
| <b>4.6</b><br>Neighbourhood Traffic Calming | <i>All elements</i>                           | <ul style="list-style-type: none"> <li>If all of the following criteria are met:               <ol style="list-style-type: none"> <li>Access is provided to a collector or local roadway</li> <li>Application is for zoning by-law amendment or draft plan of subdivision</li> <li>Development generates more than 75 vehicle trips</li> <li>Site trip infiltration is expected, and site-generated traffic will increase peak volumes by 50% or more along the route between the site and an arterial</li> <li>The subject street segment is adjacent to two or more of the following significant sensitive land uses:                   <ul style="list-style-type: none"> <li>School (within 250m walking distance)</li> <li>Park</li> <li>Retirement/older adult facility</li> <li>Licensed child care centre</li> <li>Community centre</li> <li>50+% of adjacent properties along the route(s) are occupied by residential lands and at least ten dwellings are occupied</li> </ul> </li> </ol> </li> </ul> | Exempt     |
| <b>4.7</b><br>Transit                       | <b>4.7.1</b><br>Transit Route Capacity        | <ul style="list-style-type: none"> <li>Required when proposed development generates more than 75 transit trips</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Exempt     |
|                                             | <b>4.7.2</b><br>Transit Priority Requirements | <ul style="list-style-type: none"> <li>Required when proposed development generates more than 75 vehicle trips</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Not Exempt |
| <b>4.8</b><br>Network Concept               | <i>All elements</i>                           | <ul style="list-style-type: none"> <li>Required when proposed development generates more than 200 peak hour person trips in excess of the equivalent volume permitted by the established zoning</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Exempt     |
| <b>4.9</b><br>Intersection Design           | <i>All elements</i>                           | <ul style="list-style-type: none"> <li>Required when proposed development generates more than 75 vehicle trips</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Not Exempt |

Based on the foregoing, the following modules will be included in the TIA report:

- Module 4.1: Development Design
- Module 4.2: Parking
- Module 4.3: Boundary Streets
- Module 4.5: Transportation Demand Management
- Module 4.7: Transit
- Module 4.9: Intersection Design

### 3.0 FORECASTING

#### 3.1 Other Area Developments

Projected traffic generated by the developments listed in Section 2.2.2 have been added to the background traffic volumes. A summary of these developments is included below, and relevant excerpts of their respective traffic studies are included in **Appendix F**.

##### 16 Edgewater Street

The proposed development is mixed-use, consisting of 153 apartment dwellings, 23 townhomes, 458 m<sup>2</sup> of office space, and 294 m<sup>2</sup> of commercial space. A buildout year of 2022 was estimated, however this application has not been approved at the time of writing. Therefore, projected traffic volumes have been added to the 2029, 2031, and 2036 background volumes.

##### 21 Huntmar Drive

The proposed development is residential, with a total of 344 apartment dwellings. The TIA estimated buildout to occur in 2024, however this application has not been approved at the time of writing. Therefore, projected traffic volumes have been added to the 2029, 2031, and 2036 background volumes.

##### Trail View Subdivision (950 Terry Fox Drive)

The Trail View subdivision consists of 108 single-detached homes, 77 condo dwellings, and 60 apartment dwellings. Some single-detached and condo dwellings have been built, and construction is ongoing. A buildout year of 2027 was estimated for the apartment block. For the purposes of this TIA, it is assumed that 50% of the traffic generated by the subdivision has been captured in the existing traffic volumes. Therefore, 50% of the projected traffic volumes have been added to the 2029, 2031, and 2036 background volumes.

##### 5000 Robert Grant Avenue

The proposed development is mixed-use, consisting of 504 mid-rise or high-rise dwellings and 2,185 ft<sup>2</sup> of retail space. A buildout year of 2025 was estimated. Therefore, projected traffic volumes have been added to the 2029, 2031, and 2036 background volumes.

##### Kizell Lands (5618 Hazeldean Road)

The proposed subdivision consists of 288 single-detached homes, 469 townhomes, 878 low-rise dwellings, 1,120 apartment dwellings, 351,334 ft<sup>2</sup> of retail space, a 580-student elementary school, and a 375-space park and ride. The TIA prepared by Novatech included traffic projections for two scenarios. Scenario One projections, which assumed the subdivision would adhere to the density requirements of the Fernbank CDP, have been considered for this study. A buildout year of 2031 was estimated for this subdivision. Therefore, 80% of the projected traffic volumes have been added to the 2029 background volumes, and 100% of the projected traffic volumes have been added to the 2031 and 2036 background volumes.

##### 5707 Hazeldean Road

The proposed development includes additional retail spaces at The Shoppes at Fairwinds. The gross floor area of the proposed additions total approximately 4,546 m<sup>2</sup>. A buildout year of 2021 was estimated, however these additional retail pads have not been constructed at the time of writing. Therefore, projected traffic volumes have been added to the 2029, 2031, and 2036 background volumes.

In addition to the developments previously listed, the Bradley Commons subdivision accessed by Mantra Street is partially constructed, and traffic generated by the completed residences were captured during the April 2025 traffic count at Hazeldean Road/Mantra Street/Tillage Street. The Transportation Impact Study (TIS) prepared in support of these residences (590 Hazeldean Road, prepared by Stantec in September 2013) included a traffic generation model of the Fernbank Community. The model divided the community into a total of 11 distinct traffic zones, based on physical features (such as the Hydro corridor), planned arterial/collector roadway network, and proposed intersection locations. A figure outlining the traffic zones and table outlining the estimated traffic generation for each zone is included in **Appendix F**.

Based on this model, the partially completed residential and future commercial on both sides of Mantra Street are captured by zones N1 and N6, and the estimated traffic generation at full buildout total approximately 148 vehicle trips during the AM peak hour and 184 vehicle trips during the PM peak hour. The remaining projected trips have been added to the 2029, 2031, and 2036 background volumes, based on the existing distribution observed at Hazeldean Road/Mantra Street/Tillage Street.

### 3.2 General Background Growth Rate

A review of the City's *Strategic Long-Range Model* has been conducted, comparing snapshots of 2022 and 2046 AM peak hour traffic volumes. These snapshots are included in **Appendix G**. The snapshots identify annual growth rates of approximately 0.5% to 1.5% along Hazeldean Road and Terry Fox Drive. Therefore, a conservative annual background growth rate of 2% has been applied to through volumes on the study area arterial roadways (Hazeldean Road, Terry Fox Drive, and Robert Grant Avenue), which is consistent with previous traffic studies within the Fernbank Community. No annual growth rate has been applied to the other study area roadways.

### 3.3 Projected Volumes on Robert Grant Avenue

The Fernbank TMP (prepared in 2009 by Delcan) included screenline analysis which indicated that during the 2031 PM peak hour, Robert Grant Avenue (then referred to as the 'North-South Arterial') was expected to carry northbound 'through' traffic volumes of 110 vehicles and southbound 'through' traffic volumes of 200 vehicles from Hazeldean Road to Fernbank Road, functioning as a bypass for traffic travelling to/from Stittsville that would otherwise use Stittsville Main Street. For the purposes of this study, these PM peak hour traffic volumes are carried in the 2029, 2031, and 2036 background volumes, with the reverse assumed during the AM peak hour.

The 2013 TIS prepared in support of 590 Hazeldean Road included traffic volume projections at Hazeldean Road/Robert Grant Avenue for the horizon year of that TIS, identified as 2025. Consistent with the Fernbank TMP, an assumed development rate of 500 units per year within the Fernbank Community was identified, starting in 2015 and continuing until full buildout (estimated to occur in 2034). This assumed rate of development was carried forward in other traffic studies in support of other developments within the Fernbank Community, including at 5618 Hazeldean Road. The 2025 volume projections for the eastbound left turn and southbound right turn have been added to the background volumes, with an annual growth rate of 2% applied.

### 3.4 Future Traffic Volume Figures

The figures below present the following traffic conditions:

- Other area development volumes in 2029 and 2031/2036 are shown in **Figure 12** and **13**, respectively;
- Background traffic volumes in 2029, 2031, and 2036 are shown in **Figures 14, 15, and 16**, respectively;
- Total traffic volumes in 2029, 2031, and 2036 are shown in **Figure 17, 18, and 19**, respectively.

### 3.5 Demand Rationalization

A review of the existing and background intersection operations has been conducted to determine where traffic volumes exceed capacity within the study area. The intersection parameters used in the analysis are consistent with the *Revised TIA Guidelines* (Saturated Flow Rate: 1,800 vphpl, Peak Hour Factor: 0.9 in existing conditions and 1.0 in future conditions). Per Exhibit 22 of the *Multi-Modal Level of Service (MMLOS) Guidelines*, all study area intersections are located in the General Urban Area or designated as Arterial Mainstreet. The target vehicular level of service (Auto LOS) for both is an Auto LOS D, which includes a maximum vehicle-to-capacity (v/c) ratio of 0.90 at signalized intersections, and a maximum delay of 35 seconds at unsignalized intersections. Signal timing plans have been obtained from the City, and are included in **Appendix H**.

#### 3.5.1 Existing Traffic Conditions

Intersection capacity analysis has been conducted for the existing traffic conditions, using Synchro 11 software. The results of the analysis are summarized in **Table 9** and **Table 10** for the weekday AM and PM peak hours. Detailed Synchro reports are included in **Appendix I**.

**Table 9: Existing Intersection Analysis**

| Intersection                                              | AM Peak Hour |     |       | PM Peak Hour |          |            |
|-----------------------------------------------------------|--------------|-----|-------|--------------|----------|------------|
|                                                           | Max v/c      | LOS | Mvmt  | Max v/c      | LOS      | Mvmt       |
| Hazeldean Road/<br>325m East of Iber Road                 | 0.32         | A   | EBT   | 0.53         | A        | WBT        |
| Hazeldean Road/<br>Roger Griffiths Avenue                 | 0.29         | A   | WBT   | 0.55         | A        | WBT        |
| Hazeldean Road/<br>Mantra Street/Tillage Street           | 0.32         | A   | SBL   | 0.59         | A        | WBT        |
| Hazeldean Road/<br>Terry Fox Drive                        | 0.73         | C   | EBT   | <b>0.93</b>  | <b>E</b> | <b>SBT</b> |
|                                                           |              |     |       | <b>0.95</b>  | <b>E</b> | <b>EBL</b> |
| Hazeldean Road/<br>Edgewater Street                       | 0.34         | A   | SBL   | 0.56         | A        | WBT/R      |
| Terry Fox Drive/<br>Edgewater Street/Charlie Rogers Place | 0.79         | C   | SBL   | 0.65         | B        | NBT/R      |
| Terry Fox Drive/<br>Tony Graham Rec Complex               | 0.39         | A   | NBT/R | 0.55         | A        | SBT/R      |
| Terry Fox Drive/<br>Sobey's Access                        | 0.34         | A   | NBT/R | 0.65         | B        | WBL/T      |
| Terry Fox Drive/<br>Winchester Drive/Halkirk Avenue       | 0.48         | A   | NBT/R | 0.47         | A        | SBT/R      |

Figure 12: 2029 Other Area Development-Generated Traffic Volumes

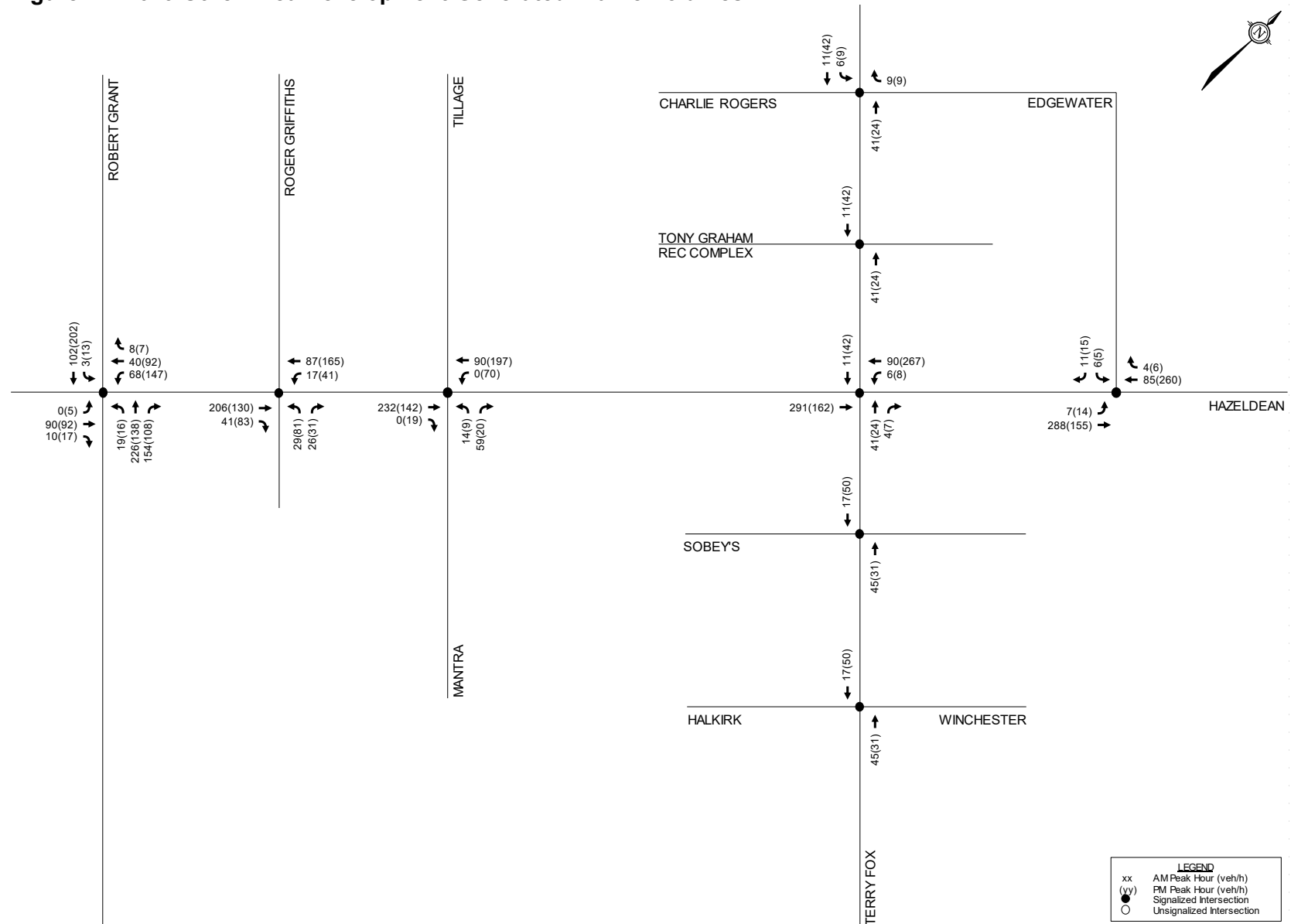




Figure 13: 2031/2036 Other Area Development-Generated Traffic Volumes

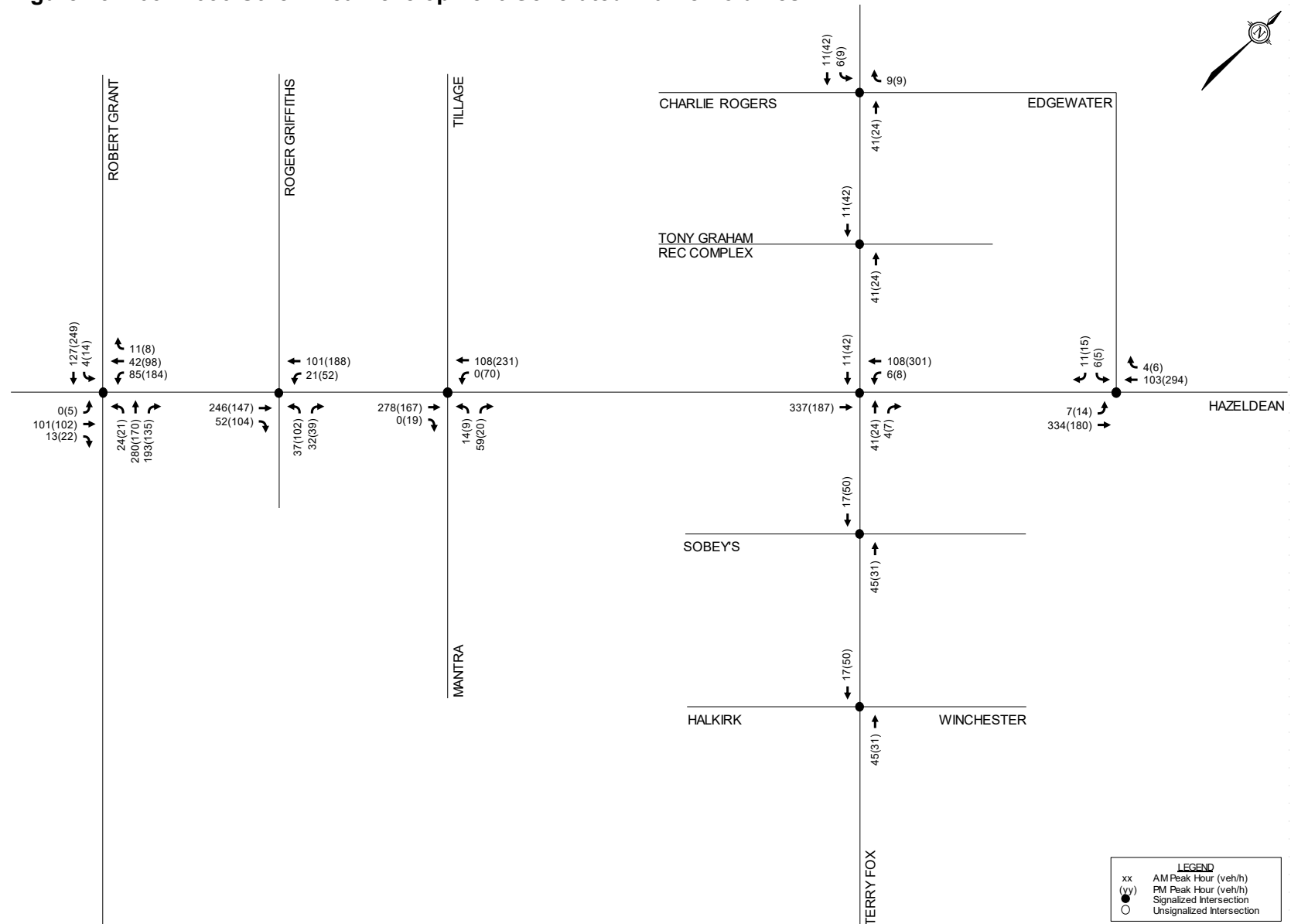


Figure 14: 2029 Background Traffic Volumes

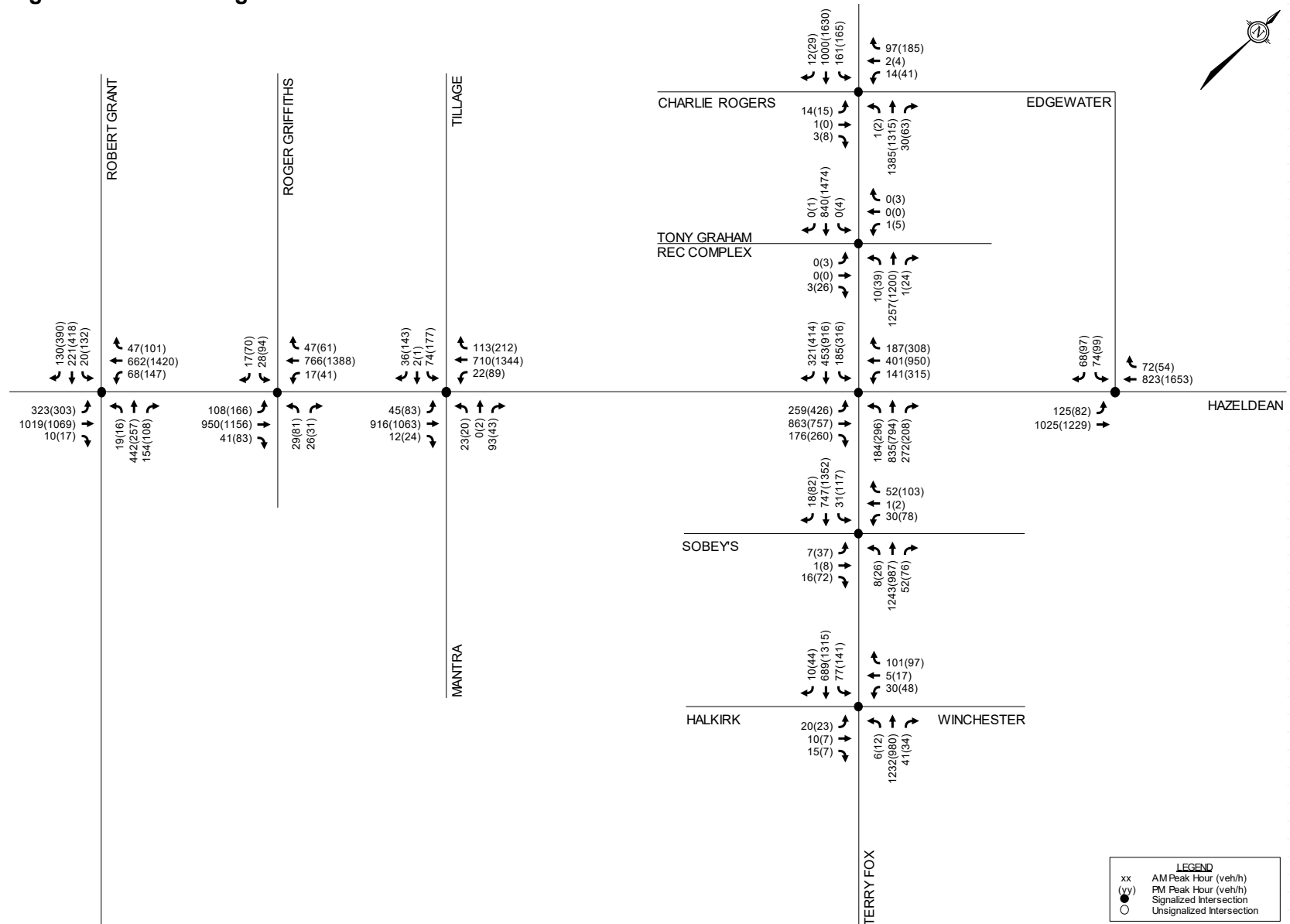


Figure 15: 2031 Background Traffic Volumes

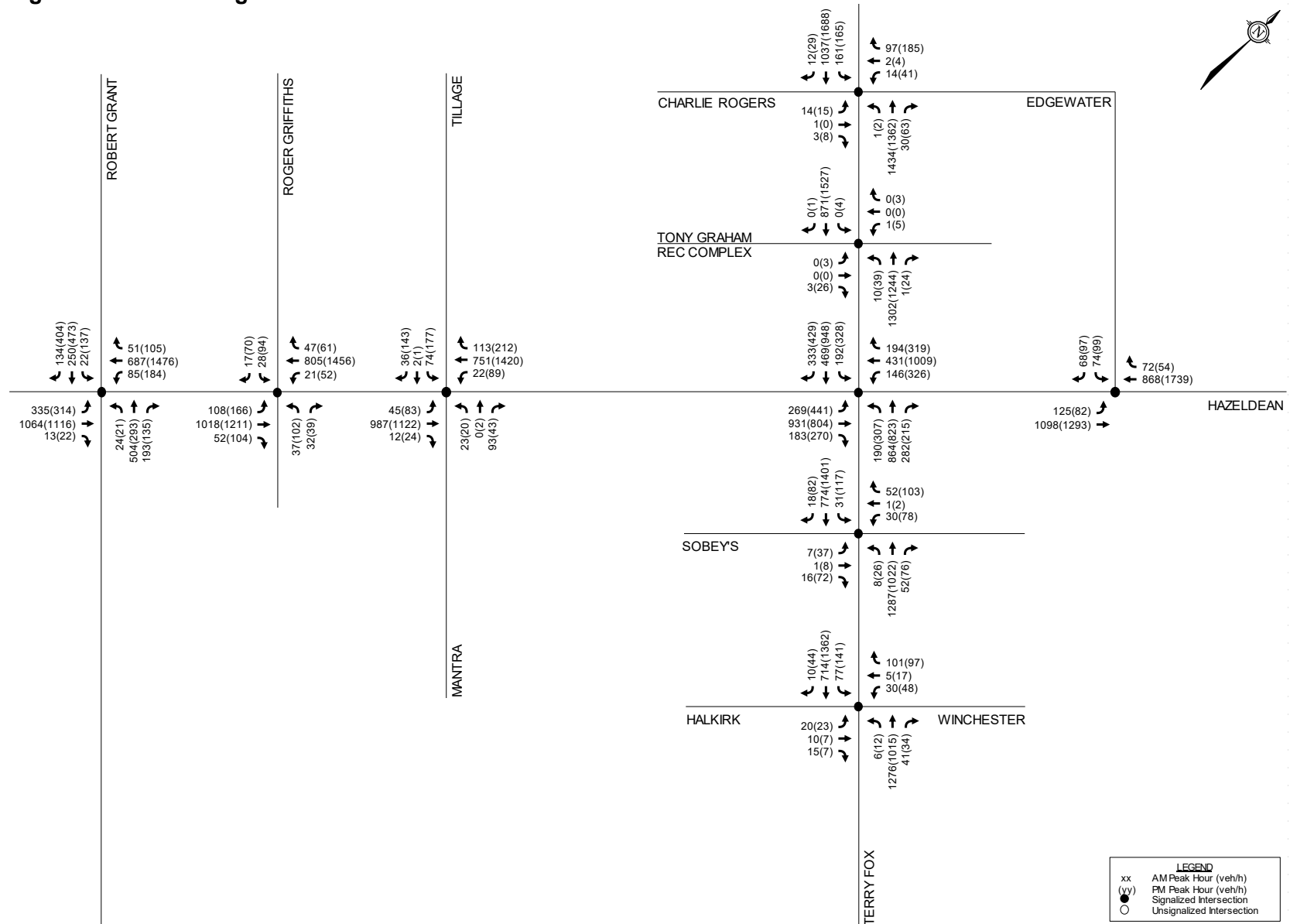


Figure 16: 2036 Background Traffic Volumes

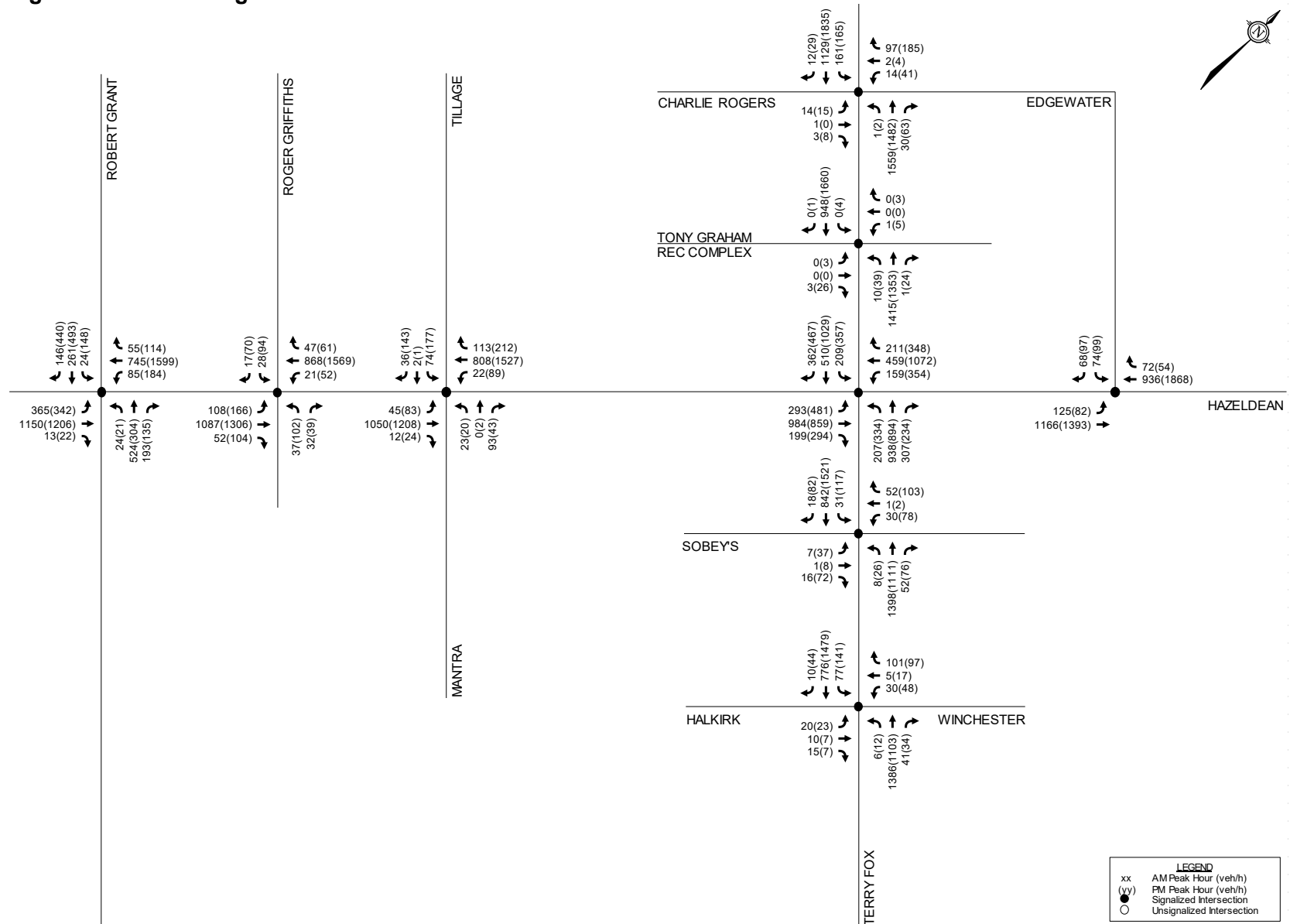


Figure 17: 2029 Total Traffic Volumes

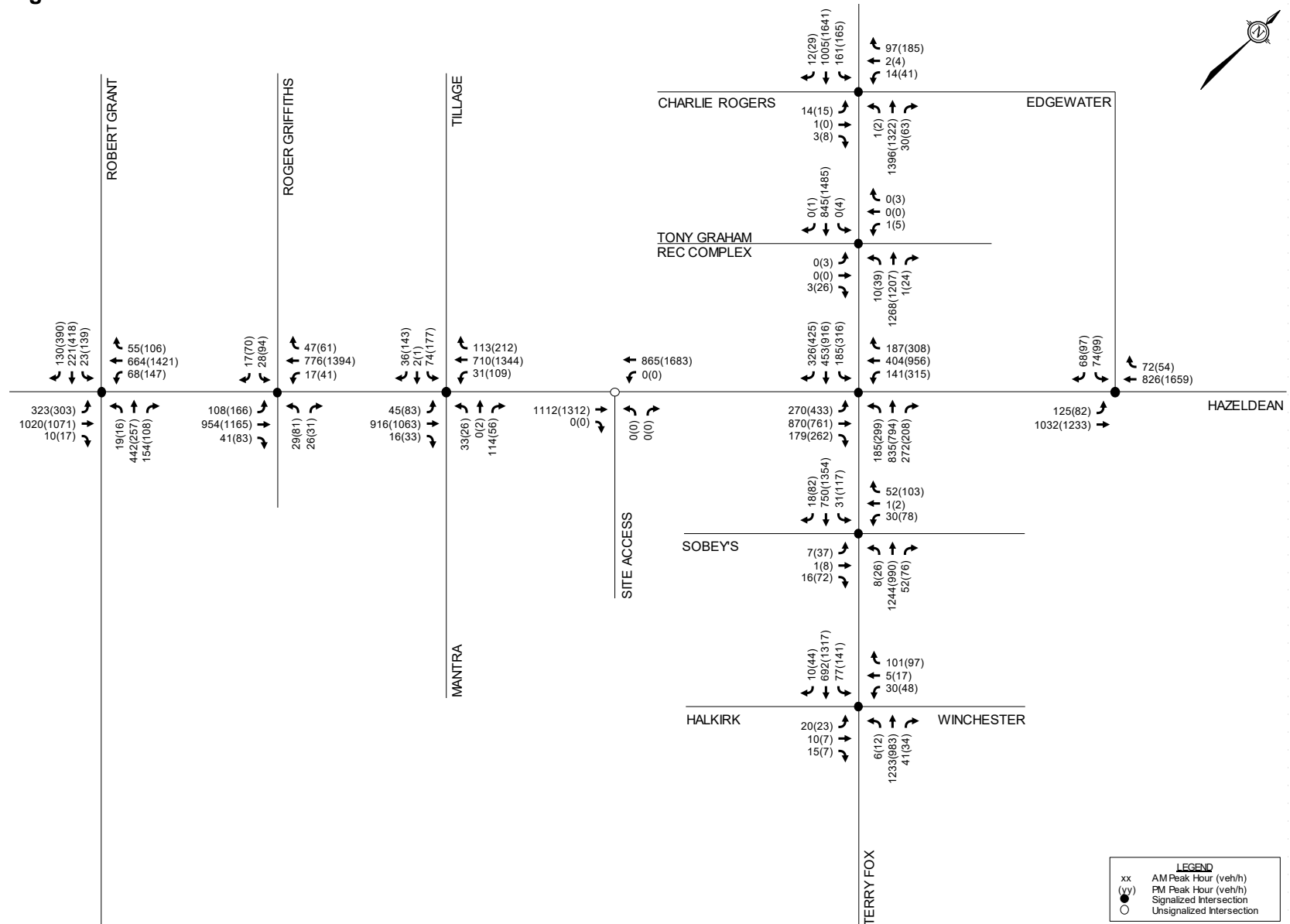


Figure 18: 2031 Total Traffic Volumes

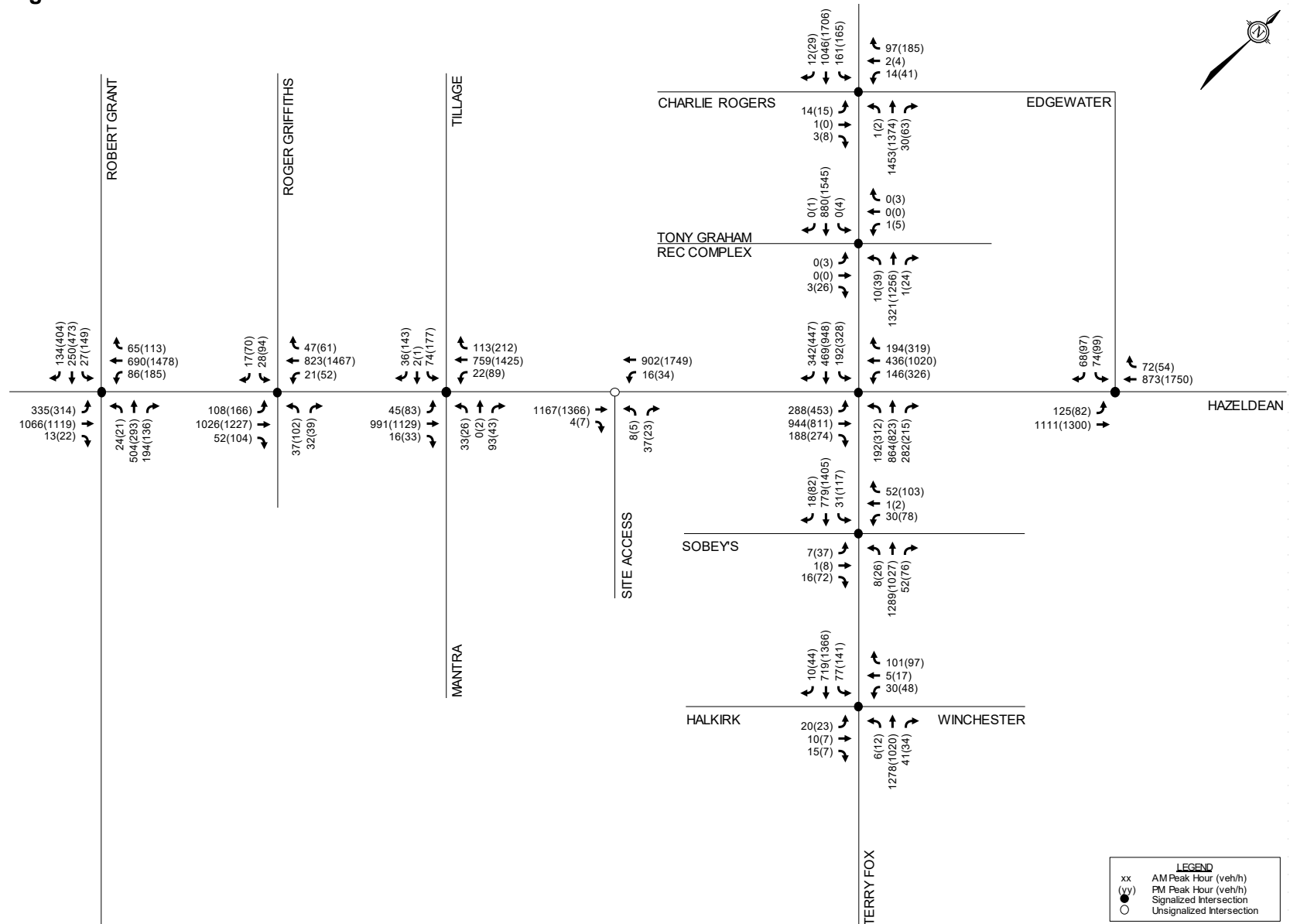




Figure 19: 2036 Total Traffic Volumes

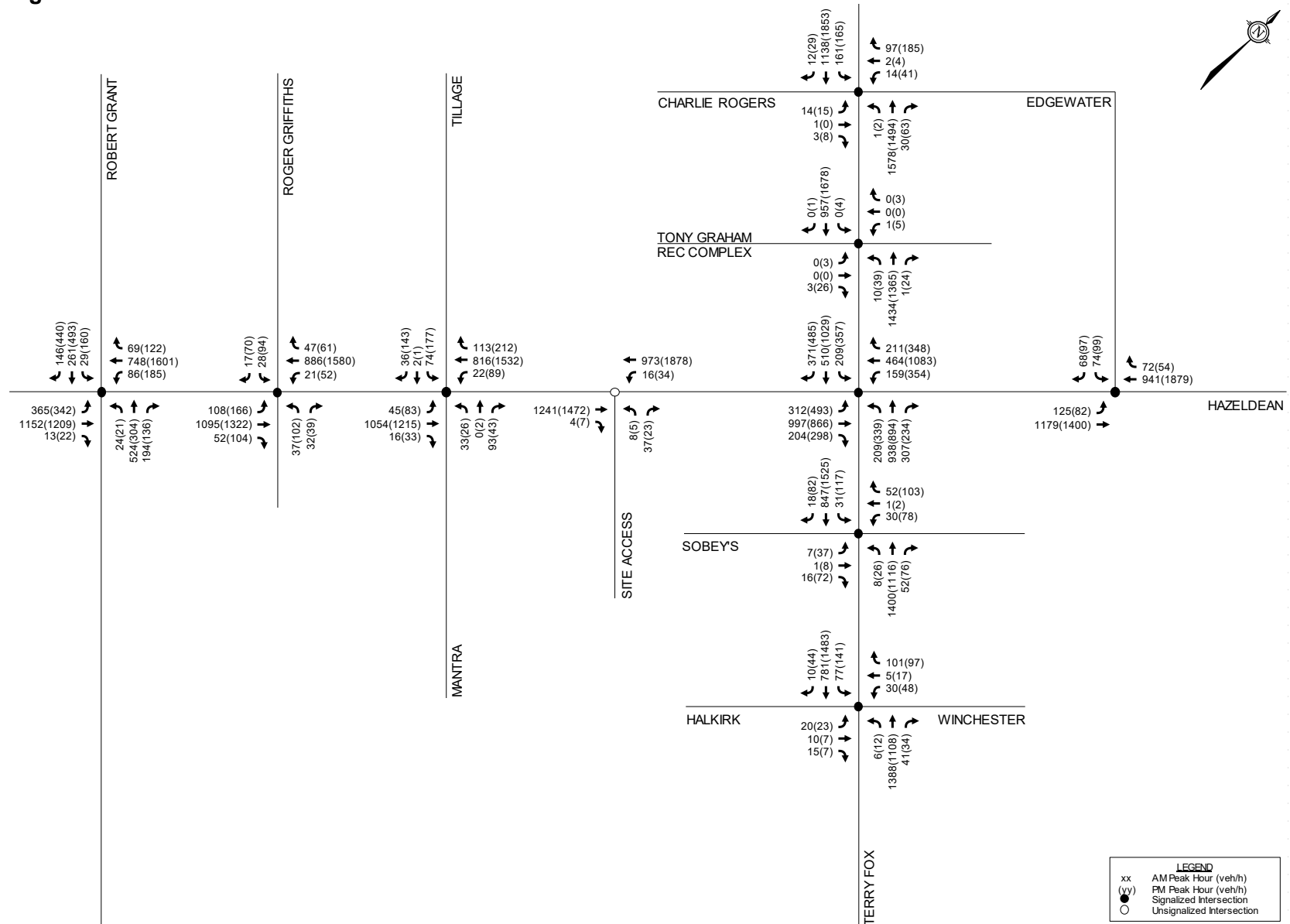


Table 10: Existing Queues

| Intersection                          | Mvmt | Spacing <sup>(1)</sup> | AM Peak      |                                 |                                 | PM Peak         |                                 |                                 |
|---------------------------------------|------|------------------------|--------------|---------------------------------|---------------------------------|-----------------|---------------------------------|---------------------------------|
|                                       |      |                        | v/c<br>[LOS] | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) | v/c<br>[LOS]    | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) |
| Hazeldean Rd/<br>325m E of Iber Rd    | EBT  | 300m                   | 0.32 [A]     | 0                               | 60                              | 0.38 [A]        | 29                              | 63                              |
|                                       | WBT  | 260m                   | 0.22 [A]     | 0                               | 10                              | 0.53 [A]        | 6                               | 12                              |
| Hazeldean Rd/<br>Roger Griffiths Ave  | EBT  | 260m                   | 0.26 [A]     | 18                              | 8                               | 0.38 [A]        | 22                              | 49                              |
|                                       | WBT  | 250m                   | 0.29 [A]     | 45                              | 76                              | 0.55 [A]        | 5                               | 9                               |
| Hazeldean Rd/<br>Mantra St/Tillage St | EBT  | 250m                   | 0.31 [A]     | 37                              | 71                              | 0.42 [A]        | 47                              | 130                             |
|                                       | WBT  | 750m                   | 0.28 [A]     | 35                              | 65                              | 0.59 [A]        | 125                             | #166                            |
| Hazeldean Rd/<br>Terry Fox Dr         | NBT  | 105m                   | 0.65 [B]     | 72                              | #112                            | 0.85 [D]        | 88                              | #120                            |
|                                       | SBT  | 280m                   | 0.37 [A]     | 35                              | 55                              | <b>0.93 [E]</b> | <b>~86</b>                      | <b>#141</b>                     |
|                                       | EBT  | 170m                   | 0.73 [C]     | 57                              | 66                              | 0.66 [B]        | 55                              | 77                              |
|                                       | WBT  | 125m                   | 0.52 [A]     | 31                              | 42                              | 0.79 [C]        | 86                              | 103                             |
| Hazeldean Rd/<br>Edgewater St         | EBT  | 125m                   | 0.27 [A]     | 34                              | 62                              | 0.42 [A]        | 70                              | 133                             |
|                                       | WBT  | 170m                   | 0.30 [A]     | 18                              | 48                              | 0.56 [A]        | 49                              | 109                             |
| Terry Fox Dr/<br>Edgewater St         | NBT  | 200m                   | 0.54 [A]     | 101                             | 22                              | 0.65 [A]        | 43                              | 32                              |
|                                       | SBT  | 300m                   | 0.40 [A]     | 25                              | 69                              | 0.62 [B]        | 53                              | 184                             |
| Terry Fox Dr/<br>Tony Graham Rec      | NBT  | 280m                   | 0.39 [A]     | 2                               | 145                             | 0.43 [A]        | 18                              | m26                             |
|                                       | SBT  | 200m                   | 0.27 [A]     | 0                               | 2                               | 0.55 [A]        | 29                              | 54                              |
| Terry Fox Dr/<br>Sobey's Access       | NBT  | 320m                   | 0.34 [A]     | 37                              | 27                              | 0.30 [A]        | 34                              | 40                              |
|                                       | SBT  | 105m                   | 0.31 [A]     | 5                               | 18                              | 0.57 [A]        | 11                              | m24                             |
| Terry Fox Dr/<br>Winchester Dr        | NBT  | 710m                   | 0.48 [A]     | 33                              | 91                              | 0.37 [A]        | 24                              | 65                              |
|                                       | SBT  | 320m                   | 0.27 [A]     | 11                              | 59                              | 0.47 [A]        | 84                              | 111                             |

1: Indicates the spacing to the nearest upstream intersection/access for through lanes

#: Volume for the 95<sup>th</sup> percentile cycle exceeds capacity

m: Queue is metered by an upstream signal

~: Approach is above capacity

From the previous tables, the southbound through and eastbound left turn movements at Hazeldean Road/Terry Fox Drive operate at an Auto LOS E during the PM peak hour. All other movements operate at the target Auto LOS D or better during both peak hours.

There are no average (i.e. 50<sup>th</sup>-percentile) queues that extend to upstream intersections. The following movements have maximum (i.e. 95<sup>th</sup>-percentile) queue lengths that extend into upstream intersections during one or both peak hours:

- Hazeldean Road/Terry Fox Drive
  - Northbound through: 112m in AM peak hour and 120m in PM peak hour (extends through signalized Sobey's Access).
- Hazeldean Road/Edgewater Street
  - Eastbound through: 133m in PM peak hour (extends through Terry Fox Drive).

It is also noted that the maximum westbound through queue at Hazeldean Road/Mantra Street/Tillage Street is 166m, extending through the median break serving the existing golf centre on the subject site. The median break starts approximately 120m east of the westbound stop bar on Hazeldean Road at Mantra Street/Tillage Street.

### 3.5.2 2029 Background Traffic Conditions

Intersection capacity analysis has been conducted for the 2029 background traffic conditions. For all future conditions, the intersection of Hazeldean Road/325m East of Iber Road is referred to as Hazeldean Road/Robert Grant Avenue, and the intersection of Hazeldean Road/Roger Griffiths Avenue is assumed to include a northbound approach (to be constructed as part of the Kizell Lands development). Signal timings for both intersections have been adjusted and optimized to reflect the new intersection geometries. The PM peak hours cycle lengths at intersections with Hazeldean Road west of Terry Fox Drive have been increased to 130 seconds.

The results of the analysis are summarized in **Table 11** and **Table 12** for the weekday AM and PM peak hours. Detailed Synchro reports are included in **Appendix J**.

**Table 11: 2029 Background Intersection Analysis**

| Intersection                                              | AM Peak Hour |     |       | PM Peak Hour |          |            |
|-----------------------------------------------------------|--------------|-----|-------|--------------|----------|------------|
|                                                           | Max v/c      | LOS | Mvmt  | Max v/c      | LOS      | Mvmt       |
| Hazeldean Road/<br>Robert Grant Avenue                    | 0.66         | B   | NBT   | 0.86         | D        | WBT        |
| Hazeldean Road/<br>Roger Griffiths Avenue                 | 0.36         | A   | EBT/R | 0.60         | A        | WBT        |
| Hazeldean Road/<br>Mantra Street/Tillage Street           | 0.43         | A   | EBT/R | 0.66         | B        | WBT        |
| Hazeldean Road/<br>Terry Fox Drive                        | 0.83         | D   | EBT   | <b>1.02</b>  | <b>F</b> | <b>SBT</b> |
|                                                           |              |     |       | <b>0.93</b>  | <b>E</b> | <b>WBT</b> |
|                                                           |              |     |       | <b>0.92</b>  | <b>E</b> | <b>EBL</b> |
|                                                           |              |     |       | <b>0.91</b>  | <b>E</b> | <b>SBL</b> |
| Hazeldean Road/<br>Edgewater Street                       | 0.37         | A   | EBT   | 0.65         | B        | WBT/R      |
| Terry Fox Drive/<br>Edgewater Street/Charlie Rogers Place | 0.74         | C   | SBL   | 0.63         | B        | NBT/R      |
| Terry Fox Drive/<br>Tony Graham Rec Complex               | 0.39         | A   | NBT/R | 0.52         | A        | SBT/R      |
| Terry Fox Drive/<br>Sobey's Access                        | 0.34         | A   | NBT/R | 0.58         | A        | WBL/T      |
| Terry Fox Drive/<br>Winchester Drive/Halkirk Avenue       | 0.48         | A   | NBT/R | 0.48         | A        | SBT        |

**Table 12: 2029 Background Queues**

| Intersection                          | Mvmt | Storage/<br>Spacing <sup>(1)</sup> | AM Peak      |                                 |                                 | PM Peak      |                                 |                                 |
|---------------------------------------|------|------------------------------------|--------------|---------------------------------|---------------------------------|--------------|---------------------------------|---------------------------------|
|                                       |      |                                    | v/c<br>[LOS] | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) | v/c<br>[LOS] | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) |
| Hazeldean Rd/<br>Robert Grant Ave     | EBT  | 300m                               | 0.54 [A]     | 60                              | 124                             | 0.59 [A]     | 81                              | 135                             |
|                                       | WBT  | 260m                               | 0.43 [A]     | 8                               | 9                               | 0.86 [D]     | 167                             | #219                            |
| Hazeldean Rd/<br>Roger Griffiths Ave  | EBT  | 260m                               | 0.36 [A]     | 13                              | 38                              | 0.45 [A]     | 35                              | 106                             |
|                                       | WBT  | 250m                               | 0.33 [A]     | 54                              | 92                              | 0.60 [A]     | 8                               | 9                               |
| Hazeldean Rd/<br>Mantra St/Tillage St | EBT  | 250m                               | 0.43 [A]     | 81                              | 92                              | 0.54 [A]     | 95                              | 148                             |
|                                       | WBT  | 750m                               | 0.35 [A]     | 40                              | 73                              | 0.66 [B]     | 109                             | #199                            |

| Intersection                     | Mvmt | Storage/<br>Spacing <sup>(1)</sup> | AM Peak      |                                 |                                 | PM Peak         |                                 |                                 |
|----------------------------------|------|------------------------------------|--------------|---------------------------------|---------------------------------|-----------------|---------------------------------|---------------------------------|
|                                  |      |                                    | v/c<br>[LOS] | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) | v/c<br>[LOS]    | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) |
| Hazeldean Rd/<br>Terry Fox Dr    | NBL  | 105m                               | 0.60 [A]     | 12                              | 31                              | 0.89 [D]        | 28                              | #58                             |
|                                  | NBT  | 105m                               | 0.79 [C]     | 83                              | #116                            | 0.90 [D]        | 89                              | #120                            |
|                                  | SBL  | 155m                               | 0.62 [B]     | 18                              | 25                              | <b>0.91 [E]</b> | <b>38</b>                       | <b>#63</b>                      |
|                                  | SBT  | 280m                               | 0.44 [A]     | 39                              | 54                              | <b>1.02 [F]</b> | <b>~94</b>                      | <b>#145</b>                     |
|                                  | EBL  | 210m                               | 0.67 [B]     | 25                              | 37                              | <b>0.92 [E]</b> | <b>48</b>                       | <b>#74</b>                      |
|                                  | EBT  | 170m                               | 0.83 [D]     | 82                              | 101                             | 0.71 [C]        | 77                              | 98                              |
|                                  | WBL  | 60m                                | 0.62 [B]     | 14                              | 24                              | 0.73 [C]        | 34                              | 48                              |
|                                  | WBT  | 125m                               | 0.47 [A]     | 39                              | 52                              | <b>0.93 [E]</b> | <b>109</b>                      | <b>#143</b>                     |
| Hazeldean Rd/<br>Edgewater St    | EBT  | 125m                               | 0.37 [A]     | 57                              | 102                             | 0.46 [A]        | 92                              | m154                            |
|                                  | WBT  | 170m                               | 0.33 [A]     | 20                              | 53                              | 0.65 [B]        | 62                              | 140                             |
| Terry Fox Dr/<br>Edgewater St    | NBT  | 200m                               | 0.54 [A]     | 5                               | 22                              | 0.63 [B]        | 42                              | 31                              |
|                                  | SBL  | 55m                                | 0.74 [C]     | 12                              | #67                             | 0.55 [A]        | 6                               | #26                             |
|                                  | SBT  | 300m                               | 0.39 [A]     | 25                              | 67                              | 0.62 [B]        | 55                              | 184                             |
| Terry Fox Dr/<br>Tony Graham Rec | NBT  | 280m                               | 0.39 [A]     | 0                               | 145                             | 0.42 [A]        | 17                              | m26                             |
|                                  | SBT  | 200m                               | 0.27 [A]     | 0                               | 2                               | 0.52 [A]        | 28                              | 54                              |
| Terry Fox Dr/<br>Sobey's Access  | NBT  | 320m                               | 0.34 [A]     | 36                              | 26                              | 0.29 [A]        | 33                              | 39                              |
|                                  | SBT  | 105m                               | 0.31 [A]     | 5                               | 17                              | 0.56 [A]        | 10                              | m20                             |
| Terry Fox Dr/<br>Winchester Dr   | NBT  | 710m                               | 0.48 [A]     | 33                              | 92                              | 0.37 [A]        | 24                              | 65                              |
|                                  | SBT  | 320m                               | 0.26 [A]     | 27                              | 60                              | 0.48 [A]        | 88                              | 116                             |

1: Indicates the storage length for auxiliary lanes or the spacing to the nearest upstream intersection/access for through lanes

#: Volume for the 95<sup>th</sup> percentile cycle exceeds capacity

m: Queue is metered by an upstream signal

~: Approach is above capacity

From the previous tables, the southbound left turn, southbound through, eastbound left turn, and westbound through movements at Hazeldean Road/Terry Fox Drive operate at an Auto LOS E or F during the PM peak hour. All other movements operate at the target Auto LOS D or better during both peak hours.

The following movements have maximum queue lengths that extend into upstream intersections or exceed the provided storage length during the peak hours:

- Hazeldean Road/Terry Fox Drive
  - Northbound through: 116m in AM peak hour and 120m in PM peak hour (extends through signalized Sobey's Access);
  - Westbound through: 143m in PM peak hour (extends through Edgewater Street).
- Hazeldean Road/Edgewater Street
  - Eastbound through: 152m in PM peak hour (extends through Terry Fox Drive).
- Terry Fox Drive/Edgewater Street/Charlie Rogers Place
  - Southbound left turn: 67m in AM peak hour (exceeds 55m storage length).

Synchro does not identify signal timing adjustments at Hazeldean Road/Terry Fox Drive that allow all movements to operate at the target Auto LOS D. Traffic throughout the study area may be displaced or alleviated through a combination of increased use of non-auto modes of transportation, alternate travel times for drivers to make use of off-peak capacity, or alternate routes for travel. Using this demand rationalization, the following approximate volume reductions would be required for the over-capacity movements to meet the target Auto LOS during the PM peak hour.

- Hazeldean Road/Terry Fox Drive
  - Southbound left: reduction of 10 vehicles;
  - Southbound through: reduction of 90 vehicles;
  - Eastbound left: reduction of 10 vehicles;
  - Westbound through: reduction of 40 vehicles.

### 3.5.3 2031 Background Traffic Conditions

Intersection capacity analysis has been conducted for the 2031 background traffic conditions. The results of the analysis are summarized in **Table 13** and **Table 14** for the weekday AM and PM peak hours. Detailed Synchro reports are included in **Appendix J**.

**Table 13: 2031 Background Intersection Analysis**

| Intersection                                              | AM Peak Hour |     |       | PM Peak Hour |          |            |
|-----------------------------------------------------------|--------------|-----|-------|--------------|----------|------------|
|                                                           | Max v/c      | LOS | Mvmt  | Max v/c      | LOS      | Mvmt       |
| Hazeldean Road/<br>Robert Grant Avenue                    | 0.68         | B   | NBT   | <b>0.94</b>  | <b>E</b> | <b>WBT</b> |
| Hazeldean Road/<br>Roger Griffiths Avenue                 | 0.38         | A   | EBT/R | 0.64         | B        | WBT        |
| Hazeldean Road/<br>Mantra Street/Tillage Street           | 0.46         | A   | EBT/R | 0.70         | B        | WBT        |
| Hazeldean Road/<br>Terry Fox Drive                        | 0.87         | D   | EBT   | <b>1.07</b>  | <b>F</b> | <b>SBT</b> |
|                                                           |              |     |       | <b>1.00</b>  | <b>E</b> | <b>SBL</b> |
|                                                           |              |     |       | <b>0.96</b>  | <b>E</b> | <b>WBT</b> |
|                                                           |              |     |       | <b>0.95</b>  | <b>E</b> | <b>EBL</b> |
|                                                           |              |     |       | <b>0.94</b>  | <b>E</b> | <b>NBL</b> |
|                                                           |              |     |       | <b>0.93</b>  | <b>E</b> | <b>NBT</b> |
| Hazeldean Road/<br>Edgewater Street                       | 0.39         | A   | EBT   | 0.68         | B        | WBT/R      |
| Terry Fox Drive/<br>Edgewater Street/Charlie Rogers Place | 0.79         | C   | SBL   | 0.66         | B        | NBT/R      |
| Terry Fox Drive/<br>Tony Graham Rec Complex               | 0.40         | A   | NBT/R | 0.54         | A        | SBT/R      |
| Terry Fox Drive/<br>Sobey's Access                        | 0.35         | A   | NBT/R | 0.58         | A        | WBL/T      |
| Terry Fox Drive/<br>Winchester Drive/Halkirk Avenue       | 0.50         | A   | NBT/R | 0.49         | A        | SBT        |

**Table 14: 2031 Background Queues**

| Intersection                          | Mvmt | Storage/<br>Spacing <sup>(1)</sup> | AM Peak      |                                 |                                 | PM Peak         |                                 |                                 |
|---------------------------------------|------|------------------------------------|--------------|---------------------------------|---------------------------------|-----------------|---------------------------------|---------------------------------|
|                                       |      |                                    | v/c<br>[LOS] | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) | v/c<br>[LOS]    | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) |
| Hazeldean Rd/<br>Robert Grant Ave     | EBT  | 300m                               | 0.59 [A]     | 75                              | 132                             | 0.66 [B]        | 112                             | 144                             |
|                                       | WBT  | 260m                               | 0.48 [A]     | 8                               | 10                              | <b>0.94 [E]</b> | <b>~197</b>                     | <b>#234</b>                     |
| Hazeldean Rd/<br>Roger Griffiths Ave  | EBT  | 260m                               | 0.38 [A]     | 15                              | 42                              | 0.48 [A]        | 55                              | 116                             |
|                                       | WBT  | 250m                               | 0.34 [A]     | 57                              | 98                              | 0.64 [B]        | 8                               | 9                               |
| Hazeldean Rd/<br>Mantra St/Tillage St | EBT  | 250m                               | 0.46 [A]     | 88                              | 96                              | 0.57 [A]        | 87                              | 148                             |
|                                       | WBT  | 750m                               | 0.37 [A]     | 43                              | 78                              | 0.70 [B]        | 119                             | #219                            |

| Intersection                     | Mvmt | Storage/<br>Spacing <sup>(1)</sup> | AM Peak      |                                 |                                 | PM Peak         |                                 |                                 |
|----------------------------------|------|------------------------------------|--------------|---------------------------------|---------------------------------|-----------------|---------------------------------|---------------------------------|
|                                  |      |                                    | v/c<br>[LOS] | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) | v/c<br>[LOS]    | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) |
| Hazeldean Rd/<br>Terry Fox Dr    | NBL  | 105m                               | 0.62 [B]     | 12                              | 32                              | <b>0.94 [E]</b> | <b>29</b>                       | <b>#61</b>                      |
|                                  | NBT  | 105m                               | 0.85 [D]     | 88                              | #123                            | <b>0.93 [E]</b> | <b>93</b>                       | <b>#127</b>                     |
|                                  | SBL  | 155m                               | 0.65 [B]     | 19                              | 26                              | <b>1.00 [E]</b> | <b>39</b>                       | <b>#67</b>                      |
|                                  | SBT  | 280m                               | 0.47 [A]     | 42                              | 56                              | <b>1.07 [F]</b> | <b>~115</b>                     | <b>#153</b>                     |
|                                  | EBL  | 210m                               | 0.69 [B]     | 26                              | 39                              | <b>0.95 [E]</b> | <b>50</b>                       | <b>#78</b>                      |
|                                  | EBT  | 170m                               | 0.87 [D]     | 89                              | 111                             | 0.74 [C]        | 84                              | 105                             |
|                                  | WBL  | 60m                                | 0.63 [B]     | 15                              | #25                             | 0.75 [C]        | 35                              | 49                              |
|                                  | WBT  | 125m                               | 0.49 [A]     | 42                              | 56                              | <b>0.96 [E]</b> | <b>116</b>                      | <b>#158</b>                     |
| Hazeldean Rd/<br>Edgewater St    | EBT  | 125m                               | 0.39 [A]     | 63                              | 112                             | 0.49 [A]        | 99                              | m160                            |
|                                  | WBT  | 170m                               | 0.34 [A]     | 21                              | 56                              | 0.68 [B]        | 69                              | 154                             |
| Terry Fox Dr/<br>Edgewater St    | NBT  | 200m                               | 0.56 [A]     | 5                               | 26                              | 0.66 [B]        | 45                              | 32                              |
|                                  | SBL  | 55m                                | 0.79 [C]     | 13                              | #70                             | 0.56 [A]        | 6                               | #39                             |
|                                  | SBT  | 300m                               | 0.41 [A]     | 26                              | 71                              | 0.64 [B]        | 60                              | 196                             |
| Terry Fox Dr/<br>Tony Graham Rec | NBT  | 280m                               | 0.40 [A]     | 0                               | 151                             | 0.44 [A]        | 18                              | m26                             |
|                                  | SBT  | 200m                               | 0.28 [A]     | 0                               | 2                               | 0.54 [A]        | 29                              | 55                              |
| Terry Fox Dr/<br>Sobey's Access  | NBT  | 320m                               | 0.35 [A]     | 38                              | 26                              | 0.30 [A]        | 34                              | 39                              |
|                                  | SBT  | 105m                               | 0.32 [A]     | 5                               | 18                              | 0.58 [A]        | 11                              | m21                             |
| Terry Fox Dr/<br>Winchester Dr   | NBT  | 710m                               | 0.50 [A]     | 35                              | 97                              | 0.38 [A]        | 25                              | 68                              |
|                                  | SBT  | 320m                               | 0.27 [A]     | 34                              | 63                              | 0.49 [A]        | 92                              | 122                             |

1: Indicates the storage length for auxiliary lanes or the spacing to the nearest upstream intersection/access for through lanes

#: Volume for the 95<sup>th</sup> percentile cycle exceeds capacity

m: Queue is metered by an upstream signal

~: Approach is above capacity

From the previous tables, the westbound through movement at Hazeldean Road/Robert Grant Avenue operates at an LOS E during the PM peak hour. The southbound through movement at Hazeldean Road/Terry Fox Drive operates at an Auto LOS F during the PM peak hour, while the northbound left turn, northbound through, southbound left turn, eastbound left turn, and westbound through movements operate at an Auto LOS E. All other movements operate at the target Auto LOS D or better during both peak hours.

The following movements have maximum queue lengths that extend into upstream intersections or exceed the provided storage length during the peak hours:

- Hazeldean Road/Terry Fox Drive
  - Northbound through: 123m in AM peak hour and 127m in PM peak hour (extends through signalized Sobey's Access);
  - Westbound through: 158m in PM peak hour (extends through Edgewater Street).
- Hazeldean Road/Edgewater Street
  - Eastbound through: 160m in PM peak hour (extends through Terry Fox Drive).
- Terry Fox Drive/Charlie Rogers Place/Edgewater Street
  - Southbound left: 70m in AM peak hour (exceeds 55m storage length provided).

Using demand rationalization, the following approximate volume reductions would be required to meet the target Auto LOS for the over-capacity movements during the PM peak hour.

- Hazeldean Road/Robert Grant Avenue
  - Westbound through: reduction of 60 vehicles.
- Hazeldean Road/Terry Fox Drive
  - Northbound left: reduction of 10 vehicles;
  - Northbound through: reduction of 10 vehicles;
  - Southbound left: reduction of 20 vehicles;
  - Southbound through: reduction of 130 vehicles;
  - Eastbound left: reduction of 30 vehicles;
  - Westbound through: reduction of 90 vehicles.

### 3.5.4 2036 Background Traffic Conditions

Intersection capacity analysis has been conducted for the 2036 background traffic conditions. The results of the analysis are summarized in **Table 15** and **Table 16** for the weekday AM and PM peak hours. Detailed Synchro reports are included in **Appendix J**.

**Table 15: 2036 Background Intersection Analysis**

| Intersection                                              | AM Peak Hour |          |            | PM Peak Hour |          |            |
|-----------------------------------------------------------|--------------|----------|------------|--------------|----------|------------|
|                                                           | Max v/c      | LOS      | Mvmt       | Max v/c      | LOS      | Mvmt       |
| Hazeldean Road/<br>Robert Grant Avenue                    | 0.71         | C        | NBT        | <b>1.05</b>  | <b>F</b> | <b>WBT</b> |
|                                                           |              |          |            | <b>0.95</b>  | <b>E</b> | <b>SBL</b> |
| Hazeldean Road/<br>Roger Griffiths Avenue                 | 0.41         | A        | EBT/R      | 0.70         | B        | WBT        |
| Hazeldean Road/<br>Mantra Street/Tillage Street           | 0.49         | A        | EBT/R      | 0.75         | C        | WBT        |
| Hazeldean Road/<br>Terry Fox Drive                        | <b>0.96</b>  | <b>E</b> | <b>NBT</b> | <b>1.16</b>  | <b>F</b> | <b>SBT</b> |
|                                                           |              |          |            | <b>1.09</b>  | <b>F</b> | <b>SBL</b> |
|                                                           |              |          |            | <b>1.04</b>  | <b>F</b> | <b>EBL</b> |
|                                                           |              |          |            | <b>1.03</b>  | <b>F</b> | <b>NBL</b> |
|                                                           |              |          |            | <b>1.02</b>  | <b>F</b> | <b>WBT</b> |
|                                                           |              |          |            | <b>1.01</b>  | <b>F</b> | <b>NBT</b> |
| Hazeldean Road/<br>Edgewater Street                       | 0.42         | A        | EBT        | 0.83         | D        | EBL        |
| Terry Fox Drive/<br>Edgewater Street/Charlie Rogers Place | <b>0.95</b>  | <b>E</b> | <b>SBL</b> | 0.74         | C        | NBT/R      |
| Terry Fox Drive/<br>Tony Graham Rec Complex               | 0.44         | A        | NBT/R      | 0.59         | A        | SBT/R      |
| Terry Fox Drive/<br>Sobey's Access                        | 0.38         | A        | NBT/R      | 0.63         | B        | SBT/R      |
| Terry Fox Drive/<br>Winchester Drive/Halkirk Avenue       | 0.54         | A        | NBT/R      | 0.54         | A        | SBT        |

**Table 16: 2036 Background Queues**

| Intersection                          | Mvmt | Storage/<br>Spacing <sup>(1)</sup> | AM Peak      |                                 |                                 | PM Peak         |                                 |                                 |
|---------------------------------------|------|------------------------------------|--------------|---------------------------------|---------------------------------|-----------------|---------------------------------|---------------------------------|
|                                       |      |                                    | v/c<br>[LOS] | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) | v/c<br>[LOS]    | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) |
| Hazeldean Rd/<br>Robert Grant Ave     | EBT  | 300m                               | 0.66 [B]     | 102                             | #158                            | 0.72 [C]        | 134                             | 161                             |
|                                       | WBT  | 260m                               | 0.57 [A]     | 71                              | 10                              | <b>1.05 [F]</b> | <b>~229</b>                     | <b>#259</b>                     |
| Hazeldean Rd/<br>Roger Griffiths Ave  | EBT  | 260m                               | 0.41 [A]     | 15                              | 45                              | 0.52 [A]        | 99                              | m128                            |
|                                       | WBT  | 250m                               | 0.37 [A]     | 64                              | 108                             | 0.70 [B]        | 156                             | 22                              |
| Hazeldean Rd/<br>Mantra St/Tillage St | EBT  | 250m                               | 0.49 [A]     | 97                              | 102                             | 0.61 [B]        | 78                              | 153                             |
|                                       | WBT  | 750m                               | 0.39 [A]     | 47                              | 85                              | 0.75 [C]        | 135                             | #247                            |



| Intersection                     | Mvmt | Storage/<br>Spacing <sup>(1)</sup> | AM Peak         |                                 |                                 | PM Peak         |                                 |                                 |
|----------------------------------|------|------------------------------------|-----------------|---------------------------------|---------------------------------|-----------------|---------------------------------|---------------------------------|
|                                  |      |                                    | v/c<br>[LOS]    | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) | v/c<br>[LOS]    | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) |
| Hazeldean Rd/<br>Terry Fox Dr    | NBL  | 105m                               | 0.67 [B]        | 14                              | 34                              | <b>1.03 [F]</b> | ~33                             | <b>#69</b>                      |
|                                  | NBT  | 105m                               | <b>0.93 [E]</b> | ~100                            | <b>#138</b>                     | <b>1.01 [F]</b> | ~105                            | <b>#145</b>                     |
|                                  | SBL  | 155m                               | 0.69 [B]        | 21                              | #30                             | <b>1.09 [F]</b> | ~46                             | <b>#75</b>                      |
|                                  | SBT  | 280m                               | 0.51 [A]        | 46                              | 62                              | <b>1.16 [F]</b> | ~135                            | <b>#174</b>                     |
|                                  | EBL  | 210m                               | 0.74 [C]        | 29                              | 42                              | <b>1.04 [F]</b> | ~58                             | <b>#88</b>                      |
|                                  | EBT  | 170m                               | 0.86 [D]        | 88                              | 110                             | 0.80 [C]        | 91                              | 114                             |
|                                  | WBL  | 60m                                | 0.69 [B]        | 16                              | #29                             | 0.79 [C]        | 39                              | #53                             |
|                                  | WBT  | 125m                               | 0.53 [A]        | 46                              | 60                              | <b>1.02 [F]</b> | ~128                            | <b>#173</b>                     |
| Hazeldean Rd/<br>Edgewater St    | EBT  | 125m                               | 0.42 [A]        | 68                              | 119                             | 0.52 [A]        | 108                             | m171                            |
|                                  | WBT  | 170m                               | 0.37 [A]        | 23                              | 62                              | 0.73 [C]        | 80                              | 179                             |
| Terry Fox Dr/<br>Edgewater St    | NBT  | 200m                               | 0.61 [B]        | 5                               | 40                              | 0.74 [C]        | 53                              | 44                              |
|                                  | SBL  | 55m                                | <b>0.95 [E]</b> | <b>19</b>                       | <b>#48</b>                      | 0.58 [A]        | 9                               | #52                             |
|                                  | SBT  | 300m                               | 0.44 [A]        | 30                              | 80                              | 0.70 [B]        | 73                              | #248                            |
| Terry Fox Dr/<br>Tony Graham Rec | NBT  | 280m                               | 0.44 [A]        | 0                               | m158                            | 0.47 [A]        | 21                              | m28                             |
|                                  | SBT  | 200m                               | 0.30 [A]        | 0                               | 2                               | 0.59 [A]        | 31                              | 59                              |
| Terry Fox Dr/<br>Sobey's Access  | NBT  | 320m                               | 0.38 [A]        | 44                              | 27                              | 0.33 [A]        | 38                              | 40                              |
|                                  | SBT  | 105m                               | 0.34 [A]        | 5                               | 19                              | 0.63 [B]        | 16                              | m22                             |
| Terry Fox Dr/<br>Winchester Dr   | NBT  | 710m                               | 0.54 [A]        | 40                              | 110                             | 0.42 [A]        | 28                              | 76                              |
|                                  | SBT  | 320m                               | 0.30 [A]        | 39                              | 72                              | 0.54 [A]        | 105                             | 135                             |

1: Indicates the storage length for auxiliary lanes or the spacing to the nearest upstream intersection/access for through lanes

#: Volume for the 95<sup>th</sup> percentile cycle exceeds capacity

m: Queue is metered by an upstream signal

~: Approach is above capacity

From the previous tables, the northbound through movement at Hazeldean Road/Terry Fox Drive and the southbound left turn movement at Terry Fox Drive/Charlie Rogers Place/Edgewater Street operates at an Auto LOS E during the AM peak hour. All other movements operate at the target Auto LOS D or better during the AM peak hour.

The westbound through movement at Hazeldean Road/Robert Grant Avenue and the northbound left turn, northbound through, southbound left turn, southbound through, eastbound left turn, and westbound through movements at Hazeldean Road/Terry Fox Drive operate at an Auto LOS F during the PM peak hour. Additionally, the southbound left turn movement at Hazeldean Road/Robert Grant Avenue operates at an Auto LOS E during the PM peak hour. All other movements operate at the target Auto LOS D or better during the PM peak hour.

The following movements have maximum queue lengths that extend into upstream intersections or exceed the provided storage length during the peak hours:

- Hazeldean Road/Terry Fox Drive
  - Northbound through: 138m in AM peak hour and 145m in PM peak hour (extends through signalized Sobey's Access);
  - Westbound through: 173m in PM peak hour (extends through Edgewater Street).
- Hazeldean Road/Edgewater Street
  - Eastbound through: 171m in PM peak hour (extends through Terry Fox Drive).

At Terry Fox Drive/Charlie Rogers Place/Edgewater Street, Synchro identifies that the provision of protected plus permitted southbound left turn phasing during the AM peak hour can be provided to improve the level of service for that movement, while maintaining acceptable operations for the northbound movements.

Using demand rationalization, the northbound through movement at Hazeldean Road/Terry Fox Drive requires an approximate volume reduction of 50 vehicles to meet the target Auto LOS during the AM peak hour.

The following approximate volume reductions would be required to meet the target Auto LOS for the over-capacity movements during the PM peak hour:

- Hazeldean Road/Robert Grant Avenue
  - Southbound left: reduction of 10 vehicles;
  - Westbound through: reduction of 230 vehicles.
- Hazeldean Road/Terry Fox Drive
  - Northbound left: reduction of 30 vehicles;
  - Northbound through: reduction of 80 vehicles;
  - Southbound left: reduction of 50 vehicles;
  - Southbound through: reduction of 210 vehicles;
  - Eastbound left: reduction of 70 vehicles;
  - Westbound through: reduction of 160 vehicles.

## 4.0 ANALYSIS

### 4.1 Development Design

#### 4.1.1 Design for Sustainable Modes

Based on the concept plan, a 3.0m-wide MUP is proposed along the eastern side of the subject site, which will provide a connection for pedestrians and cyclists to the Carp River Pathway and the existing pathway around the perimeter of the stormwater pond immediately south of the subject site. Another pathway is proposed to run between the apartment block and low-density blocks. A future Site Plan Control application will confirm the location of on-site pedestrian walkways within the apartment block, as well as the location of bicycle parking spaces for apartment residents and visitors. A pathway connection is also proposed to Street 3 at the southeast corner of the subdivision.

OC Transpo's service design guideline for peak period service is to provide service within a five-minute (400m) walk of home, work, or school for 95% of urban residents. Entrances to the low-density dwellings will generally be located within 400m walking distance of stop #1043. The proposed dwellings are anticipated to be located within 800m walking distance (i.e. a 10-minute walk) of stops #1042 and #1043. These stops are served by routes 61, 301, and 303. A future Site Plan Control application will confirm the walking distances between entrances to the proposed apartment dwellings and stops #1042 and #1043.

A review of the *Transportation Demand Management (TDM)-Supportive Development Design and Infrastructure Checklist* will be conducted in a future Site Plan Control application for the apartment block. A review of this checklist is exempt from Draft Plan of Subdivision applications.

#### 4.1.2 Circulation and Access

The *Revised TIA Guidelines* identify that this element of the Development Design module is required for Site Plan Control and Zoning By-Law Amendment applications. This module will be reviewed as part of a future Site Plan Control application for the apartment block.

#### 4.1.3 New Street Networks

This section reviews the proposed on-site private roadways. A summary of each roadway is provided as follows.

##### Street 1

Street 1 will connect to Energy Street, and run generally on an east-west alignment from Energy Street to Street 3. Street 1 will have a width of 8.5m, which is wide enough to accommodate a travel lane in each direction and on-street parking on one side.

##### Street 2

Street 2 will connect to Hazeldean Road and Bliss Crescent, and run generally on a north-south alignment from Hazeldean Road to the southern intersection with Street 3, before curving 90 degrees to connect to Bliss Crescent. Street 2 will have a width of 8.5m. The connection to Hazeldean Road will not open as part of Phase 1.

##### Street 3

Street 3 will connect to Street 2 in two locations approximately 185m apart (measuring centre to centre), acting as a crescent loop on a curvilinear alignment. Street 3 will have a width of 8.5m.

The proposed 8.5m width of each private roadway can accommodate the movements of heavy vehicles, such as fire trucks and garbage trucks. The AADT volumes on the Phase 1 private roadways are projected to be 500 vehicles per day or less, which is consistent with public lanes per TAC's *Geometric Design Guide*. Based on the low volumes and low speed, TAC suggests that no special facilities are required for pedestrians or cyclists on these types of roadways. The design of the proposed private roadways meets the following strategic directions of the City's *Building Better and Smarter Suburbs (BBSS): Strategic Direction and Action Plan*, which was prepared in February 2015:

- Design the street network based on a modified or offset grid to maximize choices of travel routes and opportunities for utility connections;
- Design the street network in conjunction with the land use and open space system to ensure direct pedestrian and cycling connectivity to key destination in the community (schools, shops, bus stops and stations, etc.);
- Avoid reverse frontage lots (rear yards abutting public streets) within a community.

#### 4.2 Parking

The subject site is located within Area C on Schedules 1 and 1A of the City's *Zoning By-Law* (ZBL). The required parking supply for the development based on the number of proposed dwellings are summarized in **Table 17**. The proposed parking supply for the future apartment block will be confirmed as part of a future Site Plan Control application.

**Table 17: Parking Requirements**

| Land Use                                         | Rate                                                                       | Units     | Required |
|--------------------------------------------------|----------------------------------------------------------------------------|-----------|----------|
| Minimum Vehicle Parking (Section 101/102 of ZBL) |                                                                            |           |          |
| Dwelling, Detached /<br>Dwelling, Townhouse      | 1.0 spaces per dwelling unit (resident)                                    | 98 units  | 98       |
|                                                  | No visitor parking requirement, as each dwelling has a garage and driveway |           | 0        |
| Dwelling,<br>Mid-Rise Apartment                  | 1.2 spaces per dwelling unit (resident)                                    | 185 units | 222      |
|                                                  | 0.2 spaces per dwelling unit (visitor)                                     |           | 37       |
| Total                                            |                                                                            |           | 357      |
| Minimum Bicycle Parking (Section 111 of ZBL)     |                                                                            |           |          |
| Dwelling, Detached                               | No requirement identified                                                  | 98 units  | 0        |
| Dwelling, Apartment                              | 0.5 spaces per dwelling unit                                               | 185 units | 93       |
| Total                                            |                                                                            |           | 93       |

### 4.3 Boundary Streets

This section provides a review of the boundary frontage to Hazeldean Road, using complete streets principles. The *MMLOS Guidelines* were used to evaluate the levels of service for each alternative mode of transportation, based on the targets for Arterial Mainstreets.

A detailed segment MMLOS review is included in **Appendix K**. A summary of the MMLOS review is provided in **Table 18**.

**Table 18: Segment MMLOS Summary**

| Segment        | PLOS   |        | BLOS   |        | TLOS   |        | TkLOS  |        |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|
|                | Actual | Target | Actual | Target | Actual | Target | Actual | Target |
| Hazeldean Road | D      | C      | E      | C      | D      | D      | A      | D      |

From the previous table, Hazeldean Road meets the target transit level of service (TLOS) and truck level of service (TkLOS), and does not meet the target pedestrian level of service (PLOS) and bicycle level of service (BLOS).

Per Exhibit 4 of the *MMLOS Guidelines*, Hazeldean Road achieves the best-possible PLOS D by providing sidewalks with a minimum width of 2.0m and minimum boulevard width of 2.0m. To achieve the target PLOS C, a reduced operating speed of 60 km/h would be required.

Per Exhibit 11 of the *MMLOS Guidelines*, Hazeldean Road cannot achieve the target BLOS C without a reduced operating speed of 60 km/h or the implementation of off-road facilities, such as cycle tracks or a multi-use pathway. This is identified for the City's consideration.

### 4.4 Transportation Demand Management

#### 4.4.1 Context for TDM

Based on the concept plan, the proposed development consists of 50 single-detached homes, 48 townhomes, and 185 apartment dwellings. As part of a future Site Plan Control application, the breakdown of apartment dwellings by unit type (i.e. studio, one bedroom, two bedroom, etc.) will be known.

#### 4.4.2 Need and Opportunity

The subject site is designated as 'Corridor – Mainstreet (Hazeldean Road)' and 'Evolving Neighbourhood' on Schedule B5 of the City of Ottawa's *Official Plan*. The implemented zoning for the property is 'Agricultural Zone' (AG[263r]), and the site is located within the Fernbank Community Design Plan (CDP) area.

As first discussed in Section 2.5.1, the assumed mode shares for the proposed development are generally consistent with the surveyed residential mode shares within the Kanata/Stittsville district (as outlined in the *TRANS Trip Generation Manual*). It is anticipated that the target mode shares can be met by the proposed development, as it is located adjacent to a developing neighbourhood and within the proximity of retail businesses, parks, the Tony Graham Rec Complex, and existing pathway network. Failure to meet the target drive share by 10% would result in an additional 15 to 16 vehicle trips during the weekday peak hours.

#### 4.4.3 TDM Program

A review of the City's *TDM Measures Checklist* has been conducted by the proponent. The completed checklist is included in **Appendix L**. While the final list of TDM measures for the apartment block will be confirmed in a future Site Plan Control application, the proponent has agreed to consider the following measures at the sales centre for the low-density residential block:

- Provide local area maps with walking/cycling access routes and key destinations;
- Provide relevant transit schedules and route maps;
- Provide a multimodal travel option information package.

### 4.5 Transit

#### 4.5.1 Transit Route Capacity

Per the Exemptions Review included in Section 2.6, this element is exempt from the TIA, as the proposed development is projected to generate fewer than 75 peak hour transit trips.

#### 4.5.2 Transit Priority Requirements

The City's *Revised TIA Guidelines* identifies that this module shall assess the effect of development driveways and development-generated transit trips to the existing transit service within the study area. The site-generated traffic projections included in Section 2.5.1 estimate approximately 32 to 33 transit trips during the weekday peak hours. This magnitude of site-generated transit volumes is anticipated to have a negligible impact on transit operations on routes that serve the study area.

As discussed in Section 2.2.1, Hazeldean Road, Terry Fox Drive, and Robert Grant Avenue are identified within its 2031 RTTP Network. In the 2031 Network Concept, Hazeldean Road and Terry Fox Drive north of Hazeldean Road are identified as transit priority corridors with isolated measures, and Robert Grant Avenue is identified as a bus rapid transit corridor with at-grade crossings south of Hazeldean Road and grade-separated crossings north of Hazeldean Road. In the 2031 Affordable Network, Hazeldean Road and Robert Grant Avenue are both transit priority corridors with isolated measures, while Terry Fox Drive has no transit priority designation.

## 4.6 Intersection Design

### 4.6.1 Intersection MMLOS

This section provides an existing conditions review of the study area intersections, using complete streets principles. The intersections have been evaluated for PLOS, BLOS, TLOS, and TkLOS. The full intersection MMLOS analysis is included in **Appendix K**. A summary of the intersection MMLOS review is shown in **Table 19**. Intersections with Hazeldean Road have been evaluated using the 'Arterial Mainstreet' targets and intersections with Terry Fox Drive have been evaluated using the 'General Urban Area' targets. Whichever target is stricter has been considered at Hazeldean Road/Terry Fox Drive.

**Table 19: Intersection MMLOS Summary**

| Intersection                           | PLOS   |        | BLOS   |        | TLOS   |        | TkLOS  |        |
|----------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
|                                        | Actual | Target | Actual | Target | Actual | Target | Actual | Target |
| Hazeldean Rd/325m E of Iber Rd         | F      | C      | F      | C      | B      | D      | C      | D      |
| Hazeldean Rd/Roger Griffiths Ave       | F      |        | F      |        | B      |        | C      |        |
| Hazeldean Rd/Mantra St/Tillage St      | F      |        | F      |        | E      |        | F      |        |
| Hazeldean Rd/Terry Fox Dr              | F      |        | F      |        | F      |        | A      |        |
| Hazeldean Rd/Edgewater St              | F      |        | F      |        | C      |        | C      |        |
| Terry Fox Dr/Charlie Rogers Pl         | F      |        | F      |        | C      |        | E      |        |
| Terry Fox Dr/Tony Graham Rec           | F      |        | F      |        | B      |        | F      |        |
| Terry Fox Dr/Sobey's Access            | F      |        | F      |        | B      |        | E      |        |
| Terry Fox Dr/Winchester Dr/Halkirk Ave | F      |        | F      |        | C      | -      | E      |        |

The results of the intersection MMLOS analysis can be summarized as follows:

- No study area intersections meet the target PLOS;
- No study area intersections meet the target BLOS;
- Seven of the nine study area intersections meet the target TLOS (the intersections at Hazeldean Road/Mantra Street/Tillage Street and Hazeldean Road/Terry Fox Drive do not);
- Four of the nine study area intersections meet the target TkLOS (the intersections at Hazeldean Road/Mantra Street/Tillage Street, Terry Fox Drive/Edgewater Street/Charlie Rogers Place, Terry Fox Drive/Tony Graham Rec Complex, Terry Fox Drive/Sobey's Access, and Terry Fox Drive/Winchester Drive/Halkirk Avenue do not).

Further discussion for each intersection is included below.

#### Hazeldean Road/325m East of Iber Road (Future Robert Grant Avenue)

This intersection does not meet the target PLOS C or BLOS C.

All approaches have a cross-section with a width equivalent to eight lanes crossed or more (assuming a lane width equals 3.5m, per the *MMLOS Guidelines*). There is limited opportunity in improving the PLOS at each approach without reducing the number of travel lanes or restricting turning movements. No approaches meet the City's vehicle/pedestrian conflict threshold for zebra-striped crosswalks (greater than 400,000 vehicle/pedestrian conflicts over an eight-hour period). There is limited opportunity in improving the delay score for pedestrians without incurring major delays for vehicles.

All approaches do not meet the target BLOS, based on left turn or right turn characteristics. As shown in **Figure 7**, a fully protected intersection will be implemented as Robert Grant Avenue is extended, which will improve the BLOS for all approaches to a BLOS A. No other recommendations are identified.

#### Hazeldean Road/Roger Griffiths Avenue

This intersection does not meet the target PLOS C or BLOS C.

All approaches have a cross-section with a width equivalent to seven lanes crossed or more. There is limited opportunity in improving the PLOS at each approach without reducing the number of travel lanes or restricting turning movements. No approaches meet the City's vehicle/pedestrian conflict threshold for zebra-striped crosswalks. There is limited opportunity in improving the delay score for pedestrians without incurring major delays for vehicles.

All approaches do not meet the target BLOS, based on left turn or right turn characteristics. A fully protected intersection would be required to achieve the target, given the high operating speeds and volumes on Hazeldean Road. This is identified for the City's consideration. Similar to the Hazeldean Road/Mantra Street/Tillage Street intersection, it is possible that some improvements could be made to this intersection when the access to the mixed-use block of the Kizell Lands subdivision (5618 Hazeldean Road) is constructed as the fourth leg.

#### Hazeldean Road/Mantra Street/Tillage Street

This intersection does not meet the target PLOS C, BLOS C, TLOS D, or TkLOS D.

All approaches have a cross-section with a width equivalent to five lanes crossed or more. There is limited opportunity in improving the PLOS at each approach without reducing the number of travel lanes or restricting turning movements. No approaches meet the City's vehicle/pedestrian conflict threshold for zebra-striped crosswalks. There is limited opportunity in improving the delay score for pedestrians without incurring major delays for vehicles.

The north and south approaches do not meet the target BLOS, based on left turn characteristics. A fully protected intersection would be required to achieve the target, given the high operating speeds and volumes on Hazeldean Road. This is identified for the City's consideration.

The east approach does not meet the target TLOS. The City's 2031 RTTP Network Concept and 2031 Affordable Network identifies transit signal priority and queue jump lanes on Hazeldean Road from Stittsville Main Street to Eagleson Road. If implemented, these measures would be expected to improve delays and achieve the target TLOS.

The west approach does not meet the target TkLOS. The receiving lane on Mantra Street is wider at the intersection before tapering to the width of one lane and it is anticipated to have met the required design vehicle movements. Therefore, no modifications to the curb radii are identified.

#### Hazeldean Road/Terry Fox Drive

This intersection does not meet the target PLOS C, BLOS C, or TLOS D.

All approaches have a cross-section with a width equivalent to ten lanes crossed or more. There is limited opportunity in improving the PLOS at each approach without reducing the number of travel lanes or restricting turning movements. The north, south, and west approaches meet the City's vehicle/pedestrian conflict threshold for zebra-striped crosswalks. There is limited opportunity in improving the delay score for pedestrians without incurring major delays for vehicles.



All approaches do not meet the target BLOS, based on left turn or right turn characteristics. A fully protected intersection would be required to achieve the target, given the high operating speeds and volumes on Hazeldean Road and Terry Fox Drive. This is identified for the City's consideration.

All approaches do not meet the target TLOS. The City's 2031 RTTP Network Concept identifies transit signal priority on Terry Fox Drive from Hazeldean Road to Highway 417. If implemented with the transit priority measures on Hazeldean Road, it is anticipated that transit delays on each approach could improve to achieve the target TLOS.

#### Hazeldean Road/Edgewater Street

This intersection does not meet the target PLOS C or BLOS C.

All approaches have a cross-section with a width equivalent to six or seven lanes crossed. There is limited opportunity in improving the PLOS at each approach without reducing the number of travel lanes or restricting turning movements. No approaches meet the City's vehicle/pedestrian conflict threshold for zebra-striped crosswalks. There is limited opportunity in improving the delay score for pedestrians without incurring major delays for vehicles.

The north and west approaches do not meet the target BLOS, based on left turn or right turn characteristics. A fully protected intersection would be required to achieve the target, given the high operating speeds and volumes on Hazeldean Road. This is identified for the City's consideration.

#### Terry Fox Drive/Edgewater Street/Charlie Rogers Place

This intersection does not meet the target PLOS C, BLOS C, or TkLOS D.

All approaches have a cross-section with a width equivalent to seven or eight lanes crossed. There is limited opportunity in improving the PLOS at each approach without reducing the number of travel lanes or restricting turning movements. No approaches meet the City's vehicle/pedestrian conflict threshold for zebra-striped crosswalks. There is limited opportunity in improving the delay score for pedestrians without incurring major delays for vehicles.

All approaches do not meet the target BLOS, based on left turn characteristics. A fully protected intersection would be required to achieve the target, given the high operating speeds and volumes on Terry Fox Drive. This is identified for the City's consideration.

The north approach does not meet the target TkLOS. The receiving lane on Charlie Rogers Place is wider at the intersection before tapering to the width of one lane. Therefore, no modifications to the curb radii are identified.

#### Terry Fox Drive/Tony Graham Rec Complex

This intersection does not meet the target PLOS C, BLOS C, or TkLOS D.

All approaches have a cross-section with a width equivalent to seven lanes crossed. There is limited opportunity in improving the PLOS at each approach without reducing the number of travel lanes or restricting turning movements. No approaches meet the City's vehicle/pedestrian conflict threshold for zebra-striped crosswalks. There is limited opportunity in improving the delay score for pedestrians without incurring major delays for vehicles.

The north, south, and west approaches do not meet the target BLOS, based on left turn characteristics. A fully protected intersection would be required to achieve the target, given the high operating speeds and volumes on Terry Fox Drive. This is identified for the City's consideration.

The north and south approaches do not meet the target TkLOS, but represent trucks turning from Terry Fox Drive onto private approaches serving the Tony Graham Rec Complex or 41 Edgewater Street. Therefore, no modifications to the curb radii are identified.

#### Terry Fox Drive/Sobey's Access

This intersection does not meet the target PLOS C, BLOS C, or TkLOS D.

All approaches have a cross-section with a width equivalent to five lanes crossed or more. There is limited opportunity in improving the PLOS at each approach without reducing the number of travel lanes or restricting turning movements. No approaches meet the City's vehicle/pedestrian conflict threshold for zebra-striped crosswalks. There is limited opportunity in improving the delay score for pedestrians without incurring major delays for vehicles.

The north and south approaches do not meet the target BLOS, based on left turn characteristics. This represents cyclists turning left from Terry Fox Drive into the commercial areas on both sides of the road. As these are private approaches, no recommendations are identified.

The north and south approaches do not meet the target TkLOS, but represent trucks turning from Terry Fox Drive onto private approaches serving the Sobey's (700 Hazeldean Road) or Terry Fox Shopping Centre (500 Hazeldean Road). Therefore, no modifications to the curb radii are identified.

#### Terry Fox Drive/Winchester Drive/Halkirk Avenue

This intersection does not meet the target PLOS C, BLOS C, or TkLOS D.

All approaches have a cross-section with a width equivalent to six or eight lanes crossed. There is limited opportunity in improving the PLOS at each approach without reducing the number of travel lanes or restricting turning movements. No approaches meet the City's vehicle/pedestrian conflict threshold for zebra-striped crosswalks. There is limited opportunity in improving the delay score for pedestrians without incurring major delays for vehicles.

All approaches do not meet the target BLOS, based on left turn or right turn characteristics. A fully protected intersection would be required to achieve the target, given the high operating speeds and volumes on Terry Fox Drive. This is identified for the City's consideration.

The north and south approaches do not meet the target TkLOS. Winchester Drive and Halkirk Avenue are residential streets that are not truck routes and are not served by transit. During the April 2025 eight-hour traffic count, a total of six heavy vehicles were observed making a northbound right turn onto Winchester Drive and four heavy vehicles were observed making a southbound right turn onto Halkirk Avenue. A summary of the heavy vehicle counts is included in **Appendix D**. Given the low volumes of heavy traffic, no modifications to the curb radii are identified.

#### 4.6.2 2029 Total Traffic Conditions

Intersection capacity analysis has been conducted for the 2029 total traffic conditions. The results of the analysis are summarized in **Table 20** and **Table 21** for the weekday AM and PM peak hours. Detailed Synchro reports are included in **Appendix M**.

**Table 20: 2029 Total Intersection Analysis**

| Intersection                                              | AM Peak Hour |     |       | PM Peak Hour |          |            |
|-----------------------------------------------------------|--------------|-----|-------|--------------|----------|------------|
|                                                           | Max v/c      | LOS | Mvmt  | Max v/c      | LOS      | Mvmt       |
| Hazeldean Road/<br>Robert Grant Avenue                    | 0.66         | B   | NBT   | 0.90         | D        | SBL        |
| Hazeldean Road/<br>Roger Griffiths Avenue                 | 0.36         | A   | EBT/R | 0.60         | A        | WBT        |
| Hazeldean Road/<br>Mantra Street/Tillage Street           | 0.45         | A   | EBT/R | 0.66         | B        | WBT        |
| Hazeldean Road/<br>Terry Fox Drive                        | 0.84         | D   | EBT   | <b>1.02</b>  | <b>F</b> | <b>SBT</b> |
|                                                           |              |     |       | <b>0.94</b>  | <b>E</b> | <b>EBL</b> |
|                                                           |              |     |       | <b>0.93</b>  | <b>E</b> | <b>WBT</b> |
|                                                           |              |     |       | <b>0.91</b>  | <b>E</b> | <b>SBL</b> |
| Hazeldean Road/<br>Edgewater Street                       | 0.37         | A   | EBT   | 0.65         | B        | WBT/R      |
| Terry Fox Drive/<br>Edgewater Street/Charlie Rogers Place | 0.75         | C   | SBL   | 0.64         | B        | NBT/R      |
| Terry Fox Drive/<br>Tony Graham Rec Complex               | 0.39         | A   | NBT/R | 0.53         | A        | SBT/R      |
| Terry Fox Drive/<br>Sobey's Access                        | 0.34         | A   | NBT/R | 0.58         | A        | WBL/T      |
| Terry Fox Drive/<br>Winchester Drive/Halkirk Avenue       | 0.48         | A   | NBT/R | 0.48         | A        | SBT        |

**Table 21: 2029 Total Queues**

| Intersection                          | Mvmt | Storage/<br>Spacing <sup>(1)</sup> | AM Peak      |                                 |                                 | PM Peak         |                                 |                                 |
|---------------------------------------|------|------------------------------------|--------------|---------------------------------|---------------------------------|-----------------|---------------------------------|---------------------------------|
|                                       |      |                                    | v/c<br>[LOS] | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) | v/c<br>[LOS]    | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) |
| Hazeldean Rd/<br>Robert Grant Ave     | EBT  | 300m                               | 0.56 [A]     | 78                              | 124                             | 0.59 [A]        | 81                              | 135                             |
|                                       | WBT  | 260m                               | 0.45 [A]     | 58                              | 9                               | 0.86 [D]        | 167                             | #219                            |
| Hazeldean Rd/<br>Roger Griffiths Ave  | EBT  | 260m                               | 0.36 [A]     | 14                              | 38                              | 0.46 [A]        | 35                              | 107                             |
|                                       | WBT  | 250m                               | 0.33 [A]     | 54                              | 94                              | 0.60 [A]        | 8                               | 10                              |
| Hazeldean Rd/<br>Mantra St/Tillage St | EBT  | 250m                               | 0.45 [A]     | 90                              | 92                              | 0.56 [A]        | 113                             | 163                             |
|                                       | WBT  | 750m                               | 0.35 [A]     | 40                              | 73                              | 0.66 [B]        | 109                             | #200                            |
| Hazeldean Rd/<br>Terry Fox Dr         | NBL  | 105m                               | 0.61 [B]     | 12                              | 31                              | 0.89 [D]        | 28                              | #59                             |
|                                       | NBT  | 105m                               | 0.80 [C]     | 83                              | #116                            | 0.90 [D]        | 88                              | #120                            |
|                                       | SBL  | 155m                               | 0.62 [B]     | 18                              | 25                              | <b>0.91 [E]</b> | <b>38</b>                       | <b>#64</b>                      |
|                                       | SBT  | 280m                               | 0.44 [A]     | 39                              | 54                              | <b>1.02 [E]</b> | <b>~95</b>                      | <b>#145</b>                     |
|                                       | EBL  | 210m                               | 0.70 [B]     | 26                              | 39                              | <b>0.94 [E]</b> | <b>49</b>                       | <b>#76</b>                      |
|                                       | EBT  | 170m                               | 0.84 [D]     | 83                              | 102                             | 0.71 [C]        | 78                              | 98                              |
|                                       | WBL  | 60m                                | 0.62 [B]     | 14                              | 24                              | 0.73 [C]        | 34                              | 48                              |
|                                       | WBT  | 125m                               | 0.48 [A]     | 39                              | 52                              | <b>0.93 [E]</b> | <b>110</b>                      | <b>#144</b>                     |
| Hazeldean Rd/<br>Edgewater St         | EBT  | 125m                               | 0.37 [A]     | 57                              | 103                             | 0.46 [A]        | 92                              | m155                            |
|                                       | WBT  | 170m                               | 0.33 [A]     | 20                              | 53                              | 0.65 [B]        | 63                              | 141                             |
| Terry Fox Dr/<br>Edgewater St         | NBT  | 200m                               | 0.54 [A]     | 5                               | 22                              | 0.64 [B]        | 42                              | 31                              |
|                                       | SBL  | 55m                                | 0.75 [C]     | 12                              | #68                             | 0.55 [A]        | 6                               | #26                             |
|                                       | SBT  | 300m                               | 0.39 [A]     | 25                              | 68                              | 0.62 [B]        | 56                              | 186                             |

| Intersection                     | Mvmt | Storage/<br>Spacing <sup>(1)</sup> | AM Peak      |                                 |                                 | PM Peak      |                                 |                                 |
|----------------------------------|------|------------------------------------|--------------|---------------------------------|---------------------------------|--------------|---------------------------------|---------------------------------|
|                                  |      |                                    | v/c<br>[LOS] | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) | v/c<br>[LOS] | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) |
| Terry Fox Dr/<br>Tony Graham Rec | NBT  | 280m                               | 0.39 [A]     | 0                               | 146                             | 0.42 [A]     | 17                              | m26                             |
|                                  | SBT  | 200m                               | 0.27 [A]     | 0                               | 2                               | 0.53 [A]     | 28                              | 54                              |
| Terry Fox Dr/<br>Sobey's Access  | NBT  | 320m                               | 0.34 [A]     | 36                              | 26                              | 0.29 [A]     | 33                              | 39                              |
|                                  | SBT  | 105m                               | 0.31 [A]     | 5                               | 17                              | 0.57 [A]     | 10                              | m20                             |
| Terry Fox Dr/<br>Winchester Dr   | NBT  | 710m                               | 0.48 [A]     | 33                              | 92                              | 0.37 [A]     | 24                              | 65                              |
|                                  | SBT  | 320m                               | 0.27 [A]     | 28                              | 60                              | 0.48 [A]     | 88                              | 116                             |

1: Indicates the storage length for auxiliary lanes or the spacing to the nearest upstream intersection/access for through lanes

#: Volume for the 95<sup>th</sup> percentile cycle exceeds capacity

m: Queue is metered by an upstream signal

~: Approach is above capacity

Compared to the 2029 background traffic conditions, the addition of site-generated traffic is anticipated to have marginal impacts to traffic operations and queueing within the study area.

The following movements have maximum queue lengths that extend into upstream intersections or exceed the provided storage length during the peak hours:

- Hazeldean Road/Terry Fox Drive
  - Northbound through: 116m in AM peak hour and 120m in PM peak hour (extends through signalized Sobey's Access);
  - Westbound through: 144m in PM peak hour (extends through Edgewater Street).
- Hazeldean Road/Edgewater Street
  - Eastbound through: 155m in PM peak hour (extends through Terry Fox Drive).
- Terry Fox Drive/Edgewater Street/Charlie Rogers Place
  - Southbound left turn: 68m in AM peak hour (exceeds 55m storage length).

Using demand rationalization, the following approximate volume reductions would be required to meet the target Auto LOS during the PM peak hour.

- Hazeldean Road/Terry Fox Drive
  - Southbound left: reduction of 10 vehicles;
  - Southbound through: reduction of 100 vehicles;
  - Eastbound left: reduction of 20 vehicles;
  - Westbound through: reduction of 40 vehicles.

#### 4.6.3 2031 Total Traffic Conditions

Intersection capacity analysis has been conducted for the 2031 total traffic conditions. The proposed site access to Hazeldean Road is anticipated to be completed with the apartment block in 2031, and is included in the analysis below as an unsignalized intersection. The results of the analysis are summarized in **Table 22** and **Table 23** for the weekday AM and PM peak hours. Detailed Synchro reports are included in **Appendix M**.

Table 22: 2031 Total Intersection Analysis

| Intersection                                              | AM Peak Hour     |     |       | PM Peak Hour     |          |            |
|-----------------------------------------------------------|------------------|-----|-------|------------------|----------|------------|
|                                                           | Max v/c or Delay | LOS | Mvmt  | Max v/c or Delay | LOS      | Mvmt       |
| Hazeldean Road/<br>Robert Grant Avenue                    | 0.69             | B   | NBT   | <b>0.96</b>      | <b>E</b> | <b>SBL</b> |
|                                                           |                  |     |       | <b>0.94</b>      | <b>E</b> | <b>WBT</b> |
| Hazeldean Road/<br>Roger Griffiths Avenue                 | 0.39             | A   | EBT/R | 0.64             | B        | WBT        |
| Hazeldean Road/<br>Mantra Street/Tillage Street           | 0.47             | A   | EBT/R | 0.70             | B        | WBT        |
| Hazeldean Road/<br>Terry Fox Drive                        | 0.87             | D   | EBT   | <b>1.07</b>      | <b>F</b> | <b>SBT</b> |
|                                                           |                  |     |       | <b>1.00</b>      | <b>E</b> | <b>SBL</b> |
|                                                           |                  |     |       | <b>0.98</b>      | <b>E</b> | <b>EBL</b> |
|                                                           |                  |     |       | <b>0.98</b>      | <b>E</b> | <b>WBT</b> |
|                                                           |                  |     |       | <b>0.96</b>      | <b>E</b> | <b>NBL</b> |
|                                                           |                  |     |       | <b>0.93</b>      | <b>E</b> | <b>NBT</b> |
| Hazeldean Road/<br>Edgewater Street                       | 0.40             | A   | EBT   | 0.68             | B        | WBT/R      |
| Terry Fox Drive/<br>Edgewater Street/Charlie Rogers Place | 0.81             | D   | SBL   | 0.67             | B        | NBT/R      |
| Terry Fox Drive/<br>Tony Graham Rec Complex               | 0.41             | A   | NBT/R | 0.55             | A        | SBT/R      |
| Terry Fox Drive/<br>Sobey's Access                        | 0.35             | A   | NBT/R | 0.58             | A        | SBT/R      |
| Terry Fox Drive/<br>Winchester Drive/Halkirk Avenue       | 0.50             | A   | NBT/R | 0.50             | A        | SBT        |
| Hazeldean Road/<br>Site Access                            | 12 sec           | B   | NBL/R | 14 sec           | B        | NBL/R      |

Table 23: 2031 Total Queues

| Intersection                          | Mvmt | Storage/<br>Spacing <sup>(1)</sup> | AM Peak      |                                 |                                 | PM Peak         |                                 |                                 |
|---------------------------------------|------|------------------------------------|--------------|---------------------------------|---------------------------------|-----------------|---------------------------------|---------------------------------|
|                                       |      |                                    | v/c<br>[LOS] | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) | v/c<br>[LOS]    | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) |
| Hazeldean Rd/<br>Robert Grant Ave     | EBT  | 300m                               | 0.60 [A]     | 90                              | 133                             | 0.66 [B]        | 113                             | 144                             |
|                                       | WBT  | 260m                               | 0.50 [A]     | 63                              | 9                               | <b>0.94 [E]</b> | <b>~197</b>                     | <b>#235</b>                     |
| Hazeldean Rd/<br>Roger Griffiths Ave  | EBT  | 260m                               | 0.39 [A]     | 15                              | 44                              | 0.49 [A]        | 56                              | m117                            |
|                                       | WBT  | 250m                               | 0.35 [A]     | 58                              | 101                             | 0.64 [B]        | 9                               | 10                              |
| Hazeldean Rd/<br>Mantra St/Tillage St | EBT  | 250m                               | 0.47 [A]     | 88                              | 96                              | 0.58 [A]        | 88                              | 151                             |
|                                       | WBT  | 750m                               | 0.37 [A]     | 43                              | 79                              | 0.70 [B]        | 120                             | #220                            |
| Hazeldean Rd/<br>Terry Fox Dr         | NBL  | 105m                               | 0.63 [B]     | 12                              | 32                              | <b>0.96 [E]</b> | <b>29</b>                       | <b>#63</b>                      |
|                                       | NBT  | 105m                               | 0.86 [D]     | 88                              | #123                            | <b>0.93 [E]</b> | <b>93</b>                       | <b>#127</b>                     |
|                                       | SBL  | 155m                               | 0.66 [B]     | 19                              | 26                              | <b>1.00 [E]</b> | <b>39</b>                       | <b>#67</b>                      |
|                                       | SBT  | 280m                               | 0.47 [A]     | 42                              | 56                              | <b>1.07 [F]</b> | <b>~115</b>                     | <b>#153</b>                     |
|                                       | EBL  | 210m                               | 0.73 [C]     | 28                              | 41                              | <b>0.98 [E]</b> | <b>51</b>                       | <b>#81</b>                      |
|                                       | EBT  | 170m                               | 0.87 [D]     | 90                              | 113                             | 0.75 [C]        | 85                              | 106                             |
|                                       | WBL  | 60m                                | 0.63 [B]     | 15                              | #25                             | 0.75 [C]        | 35                              | 49                              |
|                                       | WBT  | 125m                               | 0.49 [A]     | 43                              | 57                              | <b>0.98 [E]</b> | <b>118</b>                      | <b>#161</b>                     |
| Hazeldean Rd/<br>Edgewater St         | EBT  | 125m                               | 0.40 [A]     | 65                              | 114                             | 0.49 [A]        | 100                             | m162                            |
|                                       | WBT  | 170m                               | 0.34 [A]     | 21                              | 57                              | 0.68 [B]        | 70                              | 156                             |
| Terry Fox Dr/<br>Edgewater St         | NBT  | 200m                               | 0.57 [A]     | 5                               | 28                              | 0.67 [B]        | 46                              | 32                              |
|                                       | SBL  | 55m                                | 0.81 [D]     | 14                              | #71                             | 0.56 [A]        | 7                               | #40                             |
|                                       | SBT  | 300m                               | 0.41 [A]     | 26                              | 72                              | 0.65 [B]        | 61                              | 200                             |

| Intersection                     | Mvmt  | Storage/<br>Spacing <sup>(1)</sup> | AM Peak      |                                 |                                 | PM Peak      |                                 |                                 |
|----------------------------------|-------|------------------------------------|--------------|---------------------------------|---------------------------------|--------------|---------------------------------|---------------------------------|
|                                  |       |                                    | v/c<br>[LOS] | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) | v/c<br>[LOS] | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) |
| Terry Fox Dr/<br>Tony Graham Rec | NBT   | 280m                               | 0.41 [A]     | 0                               | 153                             | 0.44 [A]     | 18                              | m26                             |
|                                  | SBT   | 200m                               | 0.28 [A]     | 0                               | 2                               | 0.55 [A]     | 29                              | 56                              |
| Terry Fox Dr/<br>Sobey's Access  | NBT   | 320m                               | 0.35 [A]     | 38                              | 26                              | 0.30 [A]     | 35                              | 39                              |
|                                  | SBT   | 105m                               | 0.32 [A]     | 5                               | 18                              | 0.58 [A]     | 12                              | m21                             |
| Terry Fox Dr/<br>Winchester Dr   | NBT   | 710m                               | 0.50 [A]     | 35                              | 97                              | 0.39 [A]     | 25                              | 68                              |
|                                  | SBT   | 320m                               | 0.28 [A]     | 34                              | 63                              | 0.50 [A]     | 92                              | 122                             |
| Hazeldean Rd/<br>Site Access     | NBL/R | -                                  | 12 s [B]     | -                               | 2                               | 14 s [B]     | -                               | 1                               |

1: Indicates the storage length for auxiliary lanes or the spacing to the nearest upstream intersection/access for through lanes

#: Volume for the 95<sup>th</sup> percentile cycle exceeds capacity

m: Queue is metered by an upstream signal

~: Approach is above capacity

Compared to the 2031 background traffic conditions, the addition of site-generated traffic is anticipated to have marginal impacts to traffic operations and queueing within the study area. The proposed access to Hazeldean Road operates acceptably during both peak hours.

The following movements have maximum queue lengths that extend into upstream intersections or exceed the provided storage length during the peak hours:

- Hazeldean Road/Terry Fox Drive
  - Northbound through: 123m in AM peak hour and 127m in PM peak hour (extends through signalized Sobey's Access);
  - Westbound through: 161m in PM peak hour (extends through Edgewater Street).
- Hazeldean Road/Edgewater Street
  - Eastbound through: 162m in PM peak hour (extends through Terry Fox Drive).
- Terry Fox Drive/Charlie Rogers Place/Edgewater Street
  - Southbound left: 71m in AM peak hour (exceeds 55m storage length provided).

Using demand rationalization, the following approximate volume reductions would be required to meet the target Auto LOS for the over-capacity movements during the PM peak hour:

- Hazeldean Road/Robert Grant Avenue
  - Westbound through: reduction of 60 vehicles.
- Hazeldean Road/Terry Fox Drive
  - Northbound left: reduction of 10 vehicles;
  - Northbound through: reduction of 10 vehicles;
  - Southbound left: reduction of 20 vehicles;
  - Southbound through: reduction of 130 vehicles;
  - Eastbound left: reduction of 40 vehicles;
  - Westbound through: reduction of 110 vehicles.

#### 4.6.4 2036 Total Traffic Conditions

Intersection capacity analysis has been conducted for the 2036 total traffic conditions. The results of the analysis are summarized in **Table 24** and **Table 25** for the weekday AM and PM peak hours. Detailed Synchro reports are included in **Appendix M**.

**Table 24: 2036 Total Intersection Analysis**

| Intersection                                              | AM Peak Hour |          |            | PM Peak Hour               |                      |                          |
|-----------------------------------------------------------|--------------|----------|------------|----------------------------|----------------------|--------------------------|
|                                                           | Max v/c      | LOS      | Mvmt       | Max v/c                    | LOS                  | Mvmt                     |
| Hazeldean Road/<br>Robert Grant Avenue                    | 0.71         | C        | NBT        | <b>1.05</b><br><b>1.03</b> | <b>F</b><br><b>F</b> | <b>WBT</b><br><b>SBL</b> |
| Hazeldean Road/<br>Roger Griffiths Avenue                 | 0.41         | A        | EBT/R      | 0.70                       | B                    | WBT                      |
| Hazeldean Road/<br>Mantra Street/Tillage Street           | 0.49         | A        | EBT/R      | 0.75                       | C                    | WBT                      |
| Hazeldean Road/<br>Terry Fox Drive                        | <b>0.96</b>  | <b>E</b> | <b>NBT</b> | <b>1.16</b>                | <b>F</b>             | <b>SBT</b>               |
|                                                           |              |          |            | <b>1.09</b>                | <b>F</b>             | <b>SBL</b>               |
|                                                           |              |          |            | <b>1.07</b>                | <b>F</b>             | <b>EBL</b>               |
|                                                           |              |          |            | <b>1.04</b>                | <b>F</b>             | <b>NBL</b>               |
|                                                           |              |          |            | <b>1.04</b>                | <b>F</b>             | <b>WBT</b>               |
|                                                           |              |          |            | <b>1.01</b>                | <b>F</b>             | <b>NBT</b>               |
| Hazeldean Road/<br>Edgewater Street                       | 0.42         | A        | EBT        | 0.84                       | D                    | EBL                      |
| Terry Fox Drive/<br>Edgewater Street/Charlie Rogers Place | <b>0.98</b>  | <b>E</b> | <b>SBL</b> | 0.75                       | C                    | NBT/R                    |
| Terry Fox Drive/<br>Tony Graham Rec Complex               | 0.45         | A        | NBT/R      | 0.60                       | A                    | SBT/R                    |
| Terry Fox Drive/<br>Sobey's Access                        | 0.38         | A        | NBT/R      | 0.63                       | B                    | SBT/R                    |
| Terry Fox Drive/<br>Winchester Drive/Halkirk Avenue       | 0.54         | A        | NBT/R      | 0.54                       | A                    | SBT                      |
| Hazeldean Road/<br>Site Access                            | 12 sec       | B        | NBL/R      | 14 sec                     | B                    | NBL/R                    |

**Table 25: 2036 Total Queues**

| Intersection                          | Mvmt | Storage/<br>Spacing <sup>(1)</sup> | AM Peak         |                                 |                                 | PM Peak         |                                 |                                 |
|---------------------------------------|------|------------------------------------|-----------------|---------------------------------|---------------------------------|-----------------|---------------------------------|---------------------------------|
|                                       |      |                                    | v/c<br>[LOS]    | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) | v/c<br>[LOS]    | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) |
| Hazeldean Rd/<br>Robert Grant Ave     | EBT  | 300m                               | 0.66 [B]        | 102                             | #159                            | 0.72 [C]        | 134                             | 162                             |
|                                       | WBT  | 260m                               | 0.57 [A]        | 72                              | 9                               | <b>1.05 [F]</b> | <b>~230</b>                     | <b>#259</b>                     |
| Hazeldean Rd/<br>Roger Griffiths Ave  | EBT  | 260m                               | 0.41 [A]        | 16                              | 46                              | 0.52 [A]        | 101                             | m130                            |
|                                       | WBT  | 250m                               | 0.38 [A]        | 65                              | 110                             | 0.70 [B]        | 159                             | 223                             |
| Hazeldean Rd/<br>Mantra St/Tillage St | EBT  | 250m                               | 0.49 [A]        | 96                              | 102                             | 0.62 [B]        | 78                              | 154                             |
|                                       | WBT  | 750m                               | 0.40 [A]        | 47                              | 86                              | 0.75 [C]        | 135                             | #248                            |
| Hazeldean Rd/<br>Terry Fox Dr         | NBL  | 105m                               | 0.68 [B]        | 14                              | 34                              | <b>1.04 [F]</b> | <b>~34</b>                      | <b>#70</b>                      |
|                                       | NBT  | 105m                               | <b>0.96 [E]</b> | <b>~100</b>                     | <b>#138</b>                     | <b>1.01 [F]</b> | <b>~106</b>                     | <b>#145</b>                     |
|                                       | SBL  | 155m                               | 0.70 [B]        | 21                              | #30                             | <b>1.09 [F]</b> | <b>~46</b>                      | <b>#74</b>                      |
|                                       | SBT  | 280m                               | 0.53 [A]        | 46                              | 61                              | <b>1.16 [F]</b> | <b>~135</b>                     | <b>#174</b>                     |
|                                       | EBL  | 210m                               | 0.77 [C]        | 31                              | #45                             | <b>1.07 [F]</b> | <b>~61</b>                      | <b>#91</b>                      |
|                                       | EBT  | 170m                               | 0.90 [D]        | 97                              | #124                            | 0.81 [D]        | 92                              | 115                             |
|                                       | WBL  | 60m                                | 0.69 [B]        | 16                              | #29                             | 0.79 [C]        | 39                              | #52                             |
|                                       | WBT  | 125m                               | 0.52 [A]        | 46                              | 60                              | <b>1.04 [F]</b> | <b>~130</b>                     | <b>#176</b>                     |
| Hazeldean Rd/<br>Edgewater St         | EBT  | 125m                               | 0.42 [A]        | 73                              | 121                             | 0.53 [A]        | 109                             | m173                            |
|                                       | WBT  | 170m                               | 0.37 [A]        | 24                              | 62                              | 0.73 [C]        | 80                              | 181                             |
| Terry Fox Dr/<br>Edgewater St         | NBT  | 200m                               | 0.62 [B]        | 5                               | 43                              | 0.75 [C]        | 54                              | 67                              |
|                                       | SBL  | 55m                                | <b>0.98 [E]</b> | <b>20</b>                       | <b>#50</b>                      | 0.58 [A]        | 10                              | #53                             |
|                                       | SBT  | 300m                               | 0.45 [A]        | 30                              | 81                              | 0.70 [B]        | 74                              | #253                            |



| Intersection                     | Mvmt  | Storage/<br>Spacing <sup>(1)</sup> | AM Peak      |                                 |                                 | PM Peak      |                                 |                                 |
|----------------------------------|-------|------------------------------------|--------------|---------------------------------|---------------------------------|--------------|---------------------------------|---------------------------------|
|                                  |       |                                    | v/c<br>[LOS] | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) | v/c<br>[LOS] | 50 <sup>th</sup> %<br>Queue (m) | 95 <sup>th</sup> %<br>Queue (m) |
| Terry Fox Dr/<br>Tony Graham Rec | NBT   | 280m                               | 0.45 [A]     | 0                               | m157                            | 0.48 [A]     | 21                              | m27                             |
|                                  | SBT   | 200m                               | 0.31 [A]     | 0                               | 2                               | 0.60 [A]     | 32                              | 60                              |
| Terry Fox Dr/<br>Sobey's Access  | NBT   | 320m                               | 0.38 [A]     | 44                              | 27                              | 0.33 [A]     | 38                              | 40                              |
|                                  | SBT   | 105m                               | 0.35 [A]     | 5                               | 19                              | 0.63 [B]     | 16                              | m23                             |
| Terry Fox Dr/<br>Winchester Dr   | NBT   | 710m                               | 0.54 [A]     | 40                              | 111                             | 0.42 [A]     | 28                              | 76                              |
|                                  | SBT   | 320m                               | 0.30 [A]     | 39                              | 72                              | 0.54 [A]     | 105                             | 135                             |
| Hazeldean Rd/<br>Site Access     | NBL/R | -                                  | 12 s [B]     | -                               | 2                               | 14 s [B]     | -                               | 2                               |

1: Indicates the storage length for auxiliary lanes or the spacing to the nearest upstream intersection/access for through lanes

#: Volume for the 95<sup>th</sup> percentile cycle exceeds capacity

m: Queue is metered by an upstream signal

~: Approach is above capacity

Compared to the 2036 background traffic conditions, the addition of site-generated traffic is anticipated to have marginal impacts to traffic operations and queueing within the study area. The proposed access to Hazeldean Road operates acceptably during both peak hours. The following movements have maximum queue lengths that extend into upstream intersections or exceed the provided storage length during the peak hours:

- Hazeldean Road/Terry Fox Drive
  - Northbound through: 138m in AM peak hour and 145m in PM peak hour (extends through signalized Sobey's Access);
  - Westbound through: 176m in PM peak hour (extends through Edgewater Street).
- Hazeldean Road/Edgewater Street
  - Eastbound through: 173m in PM peak hour (extends through Terry Fox Drive).

At Terry Fox Drive/Charlie Rogers Place/Edgewater Street, Synchro identifies that the provision of protected plus permitted southbound left turn phasing during the AM peak hour can be provided to improve the level of service for that movement, while maintaining acceptable operations for the northbound movements.

Using demand rationalization, the northbound through movement at Hazeldean Road/Terry Fox Drive requires an approximate volume reduction of 60 vehicles to meet the target Auto LOS during the AM peak hour.

The following approximate volume reductions would be required to meet the target Auto LOS for the over-capacity movements during the PM peak hour:

- Hazeldean Road/Robert Grant Avenue
  - Southbound left: reduction of 20 vehicles;
  - Westbound through: reduction of 330 vehicles.
- Hazeldean Road/Terry Fox Drive
  - Northbound left: reduction of 30 vehicles;
  - Northbound through: reduction of 80 vehicles;
  - Southbound left: reduction of 50 vehicles;
  - Southbound through: reduction of 210 vehicles;
  - Eastbound left: reduction of 80 vehicles;
  - Westbound through: reduction of 170 vehicles.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the foregoing, the conclusions and recommendations of this TIA are summarized as follows:

### Access Intersections

- The proposed accesses to Energy Street and Bliss Crescent will be part of Phase 1, and will connect to the existing roadway blocks that have been constructed as part of the adjacent subdivision. The driveway to Hazeldean Road will be part of Phase 2, and is proposed in approximately the same location as the existing driveway serving the golf centre.
- The proposed accesses meet the relevant provisions of the City's *Private Approach By-Law* (PABL) and the Transportation Association of Canada (TAC)'s *Geometric Design Guide for Canadian Roads*. Parameters such as access grades and clear throat length will be confirmed in subsequent Site Plan Control applications.

### Site-Generated Traffic

- The proposed development is estimated to generate 158 person trips (including 79 vehicle trips) during the AM peak hour, and 164 person trips (including 84 vehicle trips) during the PM peak hour.

### Development Design

- A 3.0m-wide multi-use pathway (MUP) is proposed along the eastern side of the subject site, which will provide a connection for pedestrians and cyclists to the Carp River Pathway and the existing pathway around the perimeter of the stormwater pond immediately south of the subject site. Another pathway is proposed to run between the apartment block and low-density blocks. A pathway connection is also proposed to Street 3 at the southeast corner of the subdivision.
- Entrances to the low-density dwellings will generally be located within 400m walking distance of stop #1043. The proposed dwellings are anticipated to be located within 800m walking distance (i.e. a 10-minute walk) of stops #1042 and #1043. These stops are served by routes 61, 301, and 303. A future Site Plan Control application will confirm the walking distances between entrances to the proposed apartment dwellings and stops #1042 and #1043.
- Street 1 will connect to Energy Street, and run generally on an east-west alignment from Energy Street to Street 3. Street 1 will have a width of 8.5m, which is wide enough to accommodate a travel lane in each direction and on-street parking on one side.
- Street 2 will connect to Hazeldean Road and Bliss Crescent, and run generally on a north-south alignment from Hazeldean Road to the southern intersection with Street 3, before curving 90 degrees to connect to Bliss Crescent. Street 2 will have a width of 8.5m. The connection to Hazeldean Road will not open as part of Phase 1.
- Street 3 will connect to Street 2 in two locations approximately 185m apart (measuring centre to centre), acting as a crescent loop on a curvilinear alignment. Street 3 will have a width of 8.5m.

- The proposed 8.5m width of each private roadway can accommodate the movements of heavy vehicles, such as fire trucks and garbage trucks. The volumes on the Phase 1 private roadways are projected to be 500 vehicles per day or less, which is consistent with public lanes per TAC's *Geometric Design Guide*. TAC suggests that no special facilities are required for pedestrians or cyclists on these types of roadways.

#### Boundary Streets

- Hazeldean Road meets the target transit level of service (TLOS) and truck level of service (TkLOS), and does not meet the target pedestrian level of service (PLOS) and bicycle level of service (BLOS).
- Hazeldean Road achieves the best-possible PLOS D by providing sidewalks with a minimum width of 2.0m and minimum boulevard width of 2.0m. To achieve the target PLOS C, a reduced operating speed of 60 km/h would be required.
- Hazeldean Road cannot achieve the target BLOS C without a reduced operating speed of 60 km/h or the implementation of off-road facilities, such as cycle tracks or a multi-use pathway. This is identified for the City's consideration.

#### Transportation Demand Management

- The proponent has agreed to consider the following measures at the sales centre for the low-density residential block:
  - Provide local area maps with walking/cycling access routes and key destinations;
  - Provide relevant transit schedules and route maps;
  - Provide a multimodal travel option information package.

#### Intersection MMLOS

- The results of the intersection MMLOS analysis can be summarized as follows:
  - No study area intersections meet the target PLOS;
  - No study area intersections meet the target BLOS;
  - Seven of the nine study area intersections meet the target TLOS;
  - Four of the nine study area intersections meet the target TkLOS.
- There is limited opportunity in improving the PLOS at each intersection without reducing the number of travel lanes or restricting turning movements. There is limited opportunity in improving the delay score for pedestrians without incurring major delays for vehicles.
- In general, fully protected intersections would be required to achieve the target BLOS, given the high operating speeds and volumes on Hazeldean Road or Terry Fox Drive. This is identified for the City's consideration.
- The east approach at Hazeldean Road/Mantra Street/Tillage Street and all approaches at Hazeldean Road/Terry Fox Drive do not meet the target TLOS. The City's 2031 RTTP Network Concept and 2031 Affordable Network identifies transit signal priority and queue jump lanes on Hazeldean Road from Stittsville Main Street to Eagleson Road. The City's 2031 RTTP Network Concept identifies transit signal priority on Terry Fox Drive from Hazeldean Road to Highway 417. If implemented, it is anticipated that transit delays on these approaches could improve to achieve the target TLOS.

- Select approaches at Hazeldean Road/Mantra Street/Tillage Street, Terry Fox Drive/Edgewater Street/Charlie Rogers Place, Terry Fox Drive/Tony Graham Rec Complex, Terry Fox Drive/Sobey's Access, and Terry Fox Drive/Winchester Drive/Halkirk Avenue do not meet the target TkLOS. No recommended modifications are identified.

#### Existing Traffic Operations

- The southbound through and eastbound left turn movements at Hazeldean Road/Terry Fox Drive operate at an Auto LOS E during the PM peak hour. All other movements operate at the target Auto LOS D or better during both peak hours.
- There are no average (i.e. 50<sup>th</sup>-percentile) queues that extend to upstream intersections. The northbound through movement at Hazeldean Road/Terry Fox Drive and eastbound through movement at Hazeldean Road/Edgewater Street have maximum (i.e. 95<sup>th</sup>-percentile) queue lengths that extend into upstream intersections during one or both peak hours.
- The maximum westbound through queue at Hazeldean Road/Mantra Street/Tillage Street is 166m, extending through the median break serving the existing golf centre on the subject site. The median break starts approximately 120m east of the westbound stop bar on Hazeldean Road at Mantra Street/Tillage Street. Queueing through this median break is also anticipated in all future conditions.

#### Background Traffic Operations

- By 2036, the northbound through movement at Hazeldean Road/Terry Fox Drive and the southbound left turn movement at Terry Fox Drive/Charlie Rogers Place/Edgewater Street operate over-capacity during the AM peak hour. The southbound left turn and westbound through movements at Hazeldean Road/Robert Grant Avenue and the northbound left turn, northbound through, southbound left turn, southbound through, eastbound left turn, and westbound through movements at Hazeldean Road/Terry Fox Drive operate over-capacity during the PM peak hour.
- Synchro does not identify signal timing adjustments at Hazeldean Road/Robert Grant Avenue and Hazeldean Road/Terry Fox Drive that allow all movements to operate at the target Auto LOS D. Traffic throughout the study area may be displaced or alleviated through a combination of increased use of non-auto modes of transportation, alternate travel times for drivers to make use of off-peak capacity, or alternate routes for travel.
- At Terry Fox Drive/Charlie Rogers Place/Edgewater Street, Synchro identifies that the provision of protected plus permitted southbound left turn phasing during the AM peak hour can be provided to improve the level of service for that movement, while maintaining acceptable operations for the northbound movements.

#### Total Traffic Operations

- Compared to the background traffic conditions, the addition of site-generated traffic is anticipated to have marginal impacts to traffic operations and queueing within the study area. The proposed access to Hazeldean Road operates acceptably during both peak hours.

Based on the foregoing, the proposed subdivision is recommended from a transportation perspective.

## NOVATECH

Prepared by:



Joshua Audia, P.Eng.  
Project Engineer | Transportation

Reviewed by:



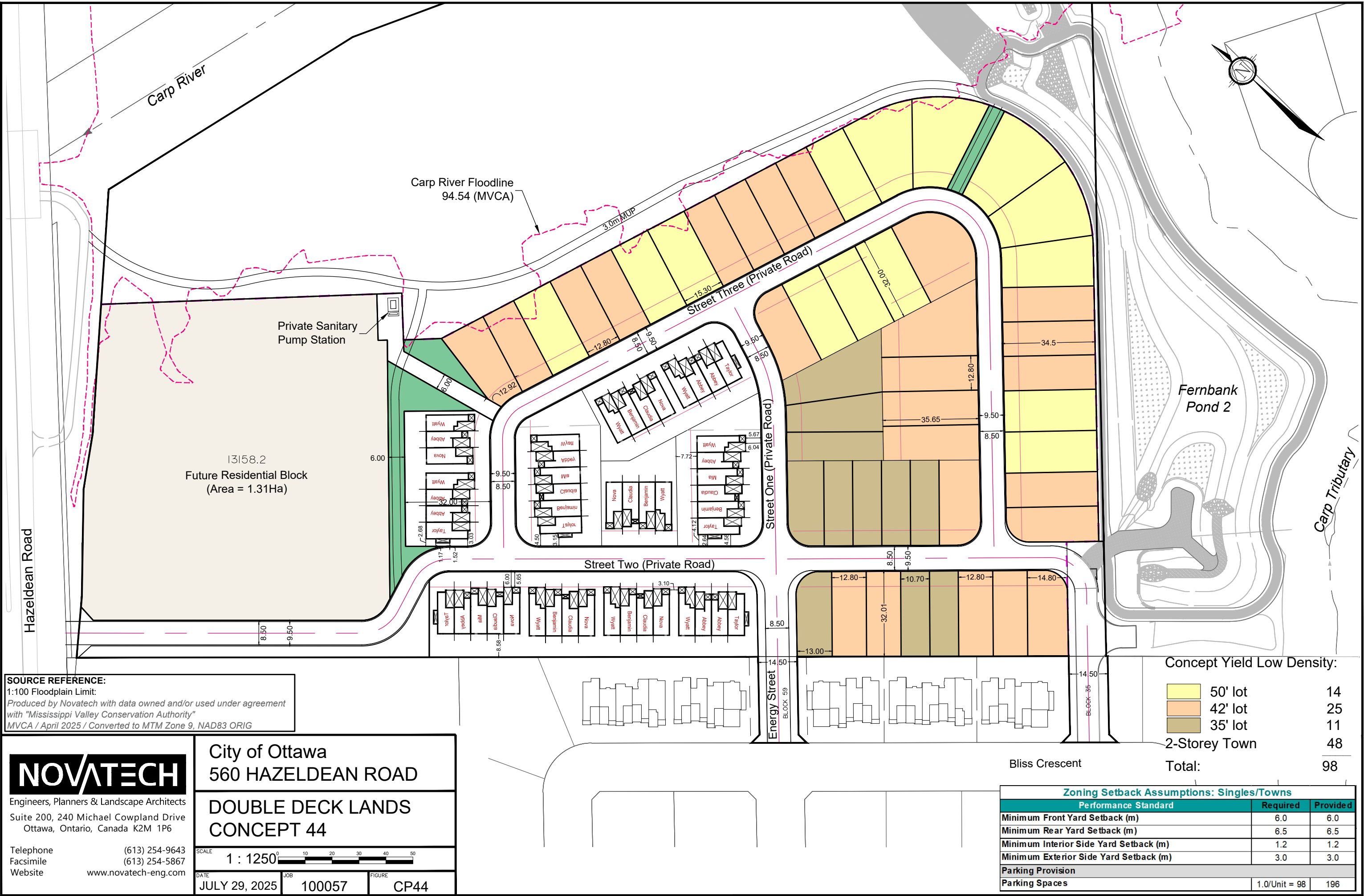
Jennifer Luong, P.Eng.  
Senior Project Manager | Transportation

## **APPENDIX A**

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### Concept Plan

M:\2000\100057\Subdivision\CAD\Planning\Concept Plans\100057-CP44.dwg, 11x17 landscape, Jul 29, 2025 - 2:45pm, wsl:oss



**SOURCE REFERENCE:**  
1:100 Floodplain Limit:  
*Produced by Novatech with data owned and/or used under agreement with "Mississippi Valley Conservation Authority"*  
MVCA / April 2025 / Converted to MTM Zone 9, NAD83 ORIG



Engineers, Planners & Landscape Architects  
Suite 200, 240 Michael Cowpland Drive  
Ottawa, Ontario, Canada K2M 1P6

Telephone (613) 254-9643  
Facsimile (613) 254-5867  
Website [www.novatech-eng.com](http://www.novatech-eng.com)

City of Ottawa  
560 HAZELDEAN ROAD

DOUBLE DECK LANDS  
CONCEPT 44

SCALE 1 : 1250

DATE JULY 29, 2025 JOB 100057 FIGURE CP44

Concept Yield Low Density:

|               |    |
|---------------|----|
| 50' lot       | 14 |
| 42' lot       | 25 |
| 35' lot       | 11 |
| 2-Storey Town | 48 |
| Total:        | 98 |

Zoning Setback Assumptions: Singles/Towns

| Performance Standard                   | Required      | Provided |
|----------------------------------------|---------------|----------|
| Minimum Front Yard Setback (m)         | 6.0           | 6.0      |
| Minimum Rear Yard Setback (m)          | 6.5           | 6.5      |
| Minimum Interior Side Yard Setback (m) | 1.2           | 1.2      |
| Minimum Exterior Side Yard Setback (m) | 3.0           | 3.0      |
| Parking Provision                      |               |          |
| Parking Spaces                         | 1.0/Unit = 98 | 196      |



## **APPENDIX B**

---

### TIA Screening Form

City of Ottawa 2017 TIA Guidelines TIA Screening

1. Description of Proposed Development

|                                                 |                                                     |
|-------------------------------------------------|-----------------------------------------------------|
| Municipal Address                               | 560 Hazeldean Road                                  |
| Description of Location                         | South of Hazeldean Rd, east of Mantra St/Tillage St |
| Land Use Classification                         | Residential                                         |
| Development Size (units)                        | 50 singles, 48 towns, 185 apartments                |
| Development Size square metre (m <sup>2</sup> ) | -                                                   |
| Number of Accesses and Locations                | 3 (Hazeldean Rd, Energy St, Bliss Cres)             |
| Phase of Development                            | 2                                                   |
| Buildout Year                                   | 2029 (Phase 1), 2031 (full buildout)                |

If available, please attach a sketch of the development or site plan to this form.

2. Trip Generation Trigger

Considering the Development's Land Use type and Size (as filled out in the previous section), please refer to the Trip Generation Trigger checks below.

Table notes:

1. Table 2, Table 3 & Table 4 TRANS Trip Generation Manual
2. Institute of Transportation Engineers (ITE) Trip Generation Manual 11.1 Ed.

| Land Use Type                                    | Minimum Development Size |
|--------------------------------------------------|--------------------------|
| Single-family homes                              | 60 units                 |
| Multi-Use Family (Low-Rise) <sup>1</sup>         | 90 units                 |
| Multi-Use Family (High-Rise) <sup>1</sup>        | 150 units                |
| Office <sup>2</sup>                              | 1,400 m <sup>2</sup>     |
| Industrial <sup>2</sup>                          | 7,000 m <sup>2</sup>     |
| Fast-food restaurant or coffee shop <sup>2</sup> | 110 m <sup>2</sup>       |
| Destination retail <sup>2</sup>                  | 1,800 m <sup>2</sup>     |
| Gas station or convenience market <sup>2</sup>   | 90 m <sup>2</sup>        |

**If the proposed development size is equal to or greater than the sizes identified above, the Trip Generation Trigger is satisfied.**

### 3. Location Triggers

|                                                                                                                                                                            | Yes                                 | No                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| Does the development propose a new driveway to a boundary street that is designated as part of the Transit Priority Network, Rapid Transit network or Cross-Town Bikeways? | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Is the development in a Hub, a Protected Major Transit Station Area (PMTSA), or a Design Priority Area (DPA)? <sup>2</sup>                                                 | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**If any of the above questions were answered with ‘Yes,’ the Location Trigger is satisfied.**

### 4. Safety Triggers

|                                                                                                                                                                                                                                   | Yes                                 | No                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------|
| Are posted speed limits on a boundary street are 80 kilometers per hour (km/h) or greater?                                                                                                                                        | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Are there any horizontal/vertical curvatures on a boundary street limits sight lines at a proposed driveway?                                                                                                                      | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Is the proposed driveway within the area of influence of an adjacent traffic signal or roundabout (i.e. within 300 metre [m] of intersection in rural conditions, or within 150 m of intersection in urban/ suburban conditions)? | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Is the proposed driveway within auxiliary lanes of an intersection?                                                                                                                                                               | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Does the proposed driveway make use of an existing median break that serves an existing site?                                                                                                                                     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

---

<sup>2</sup> Hubs are identified in Schedules B1 to B8 of the City of Ottawa Official Plan. PMTSAs are identified in Schedule C1 of the Official Plan. DPAs are identified in Schedule C7A and C7B of the Official. See Chapter 4 for a list of City of Ottawa Planning and Engineering documents that support the completion of TIA.

## Transportation Impact Assessment Guidelines

|                                                                                                                                    | Yes                      | No                                  |
|------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-------------------------------------|
| Is there is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Does the development include a drive-thru facility?                                                                                | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**If any of the above questions were answered with 'Yes,' the Safety Trigger is satisfied.**

### 5. Summary

| Results of Screening                                      | Yes                                 | No                       |
|-----------------------------------------------------------|-------------------------------------|--------------------------|
| Does the development satisfy the Trip Generation Trigger? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Does the development satisfy the Location Trigger?        | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Does the development satisfy the Safety Trigger?          | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**If none of the triggers are satisfied, the TIA Study is complete. If one or more of the triggers is satisfied, the TIA Study must continue into the next stage (Screening and Scoping).**

## **APPENDIX C**

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### OC Transpo Route Maps

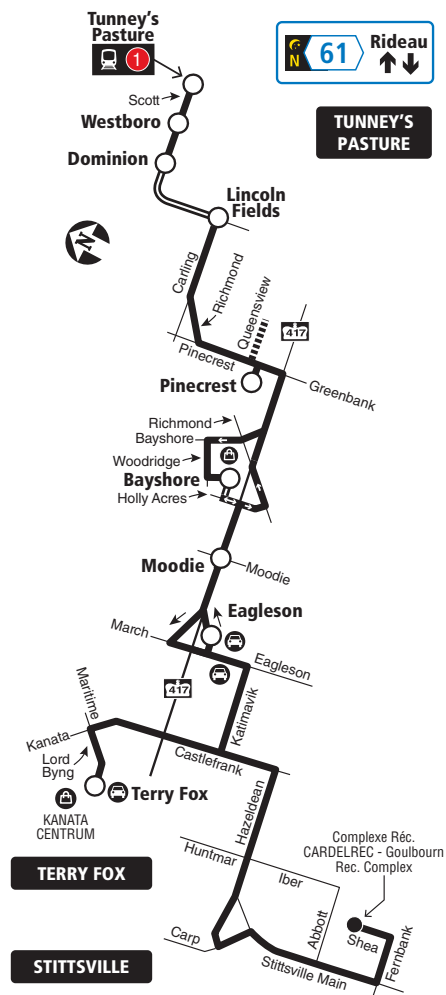
# 61

Fréquent

## STITTSVILLE TERRY FOX TUNNEY'S PASTURE

7 days a week / 7 jours par semaine

All day and limited overnight service  
Service toute la journée et limité la nuit



When O-Train Line 1 is not running overnight, Route 61 will be extended downtown to Rideau Station. / Lorsque la Ligne 1 de l'O-Train ne circule pas la nuit, le circuit 61 sera prolongée au centre-ville jusqu'à la station Rideau.

2025.04

This route starts on April 27, 2025 when the New Ways to Bus network comes into effect.

Ce circuit sera mis en service  
le 27 avril 2025, lorsque le réseau  
L'autobus réinventé entrera en vigueur.

Customer Service /  
Service à la clientèle . . . . 613-560-5000

Security / Sécurité . . . . . 613-741-2478

**OC Transpo**

**octranspo.com**

# 67

## Local

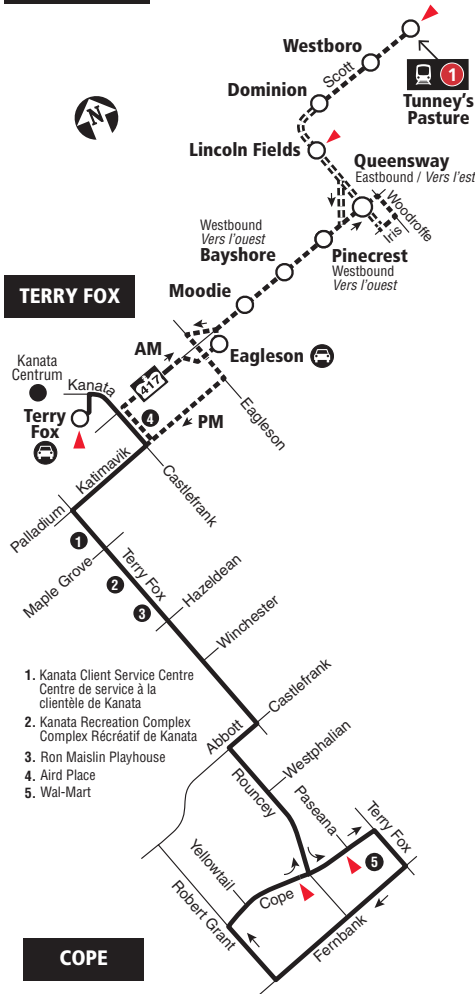
COPE

**TUNNEY'S PASTURE  
TERRY FOX**

**Monday to Friday / lundi au vendredi**

All day service  
Service toute la journée

**TUNNEY'S  
PASTURE**



- Transitway & Station
- Peak Periods Only / Périodes de pointe seulement
- Park & Ride / Parc-o-bus
- Timepoint / Heures de passage

2022.05

2022.06



**Schedule / Horaire ..... 613-560-1000**

**Text / Texto\* ..... 560560**

plus your four digit bus stop number / plus votre numéro d'arrêt à quatre chiffres

\*Standard message rates may apply / Les tarifs réguliers de messagerie texte peuvent s'appliquer

Customer Service

Service à la clientèle ..... **613-560-5000**

Lost and Found / Objets perdus ..... **613-563-4011**

Security / Sécurité ..... **613-741-2478**

**Effective June 26, 2022**

**En vigueur 26 juin 2022**



INFO 613-560-5000  
octranspo.com



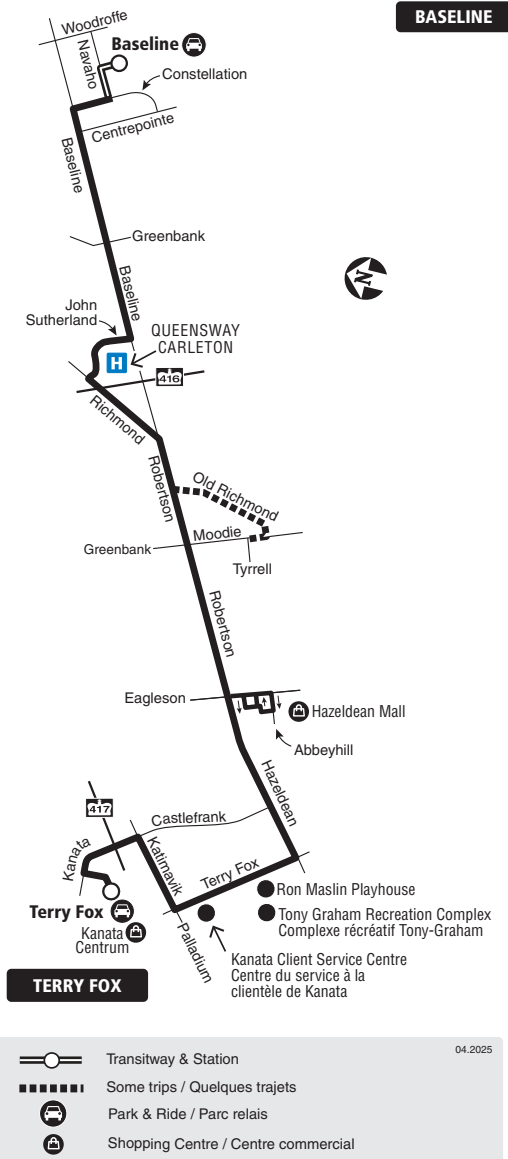
# 68

Fréquent

**BASELINE  
TERRY FOX**

**7 days a week / 7 jours par semaine**

All day service  
Service toute la journée



2025.04

**This route starts on April 27, 2025** when the New Ways to Bus network comes into effect.

**Ce circuit sera mis en service le 27 avril 2025**, lorsque le réseau L'autobus réinventé entrera en vigueur.

Customer Service /  
Service à la clientèle . . . . **613-560-5000**

Security / Sécurité . . . . . **613-741-2478**



**octranspo.com**

# 301

## CARLINGWOOD RICHMOND STITTSVILLE

### Local

**Monday only / Lundi seulement**

Peak periods only

Périodes de pointe seulement

**AM**  
↑ **CARLINGWOOD**



**PM**  
↓ **RICHMOND**

Transitway & Station  
Park & Ride / Parc-o-bus

2022.04

2022.04



**Schedule / Horaire ..... 613-560-1000**

**Text / Texto\* ..... 560560**

plus your four digit bus stop number / plus votre numéro d'arrêt à quatre chiffres

\*Standard message rates may apply / Les tarifs réguliers de messagerie texte peuvent s'appliquer

Customer Service

Service à la clientèle ..... **613-560-5000**

Lost and Found / Objets perdus ..... **613-563-4011**

Security / Sécurité ..... **613-741-2478**

**Effective April 24, 2022**

**En vigueur 24 avril 2022**



**INFO 613-560-5000**  
**octranspo.com**

# 303

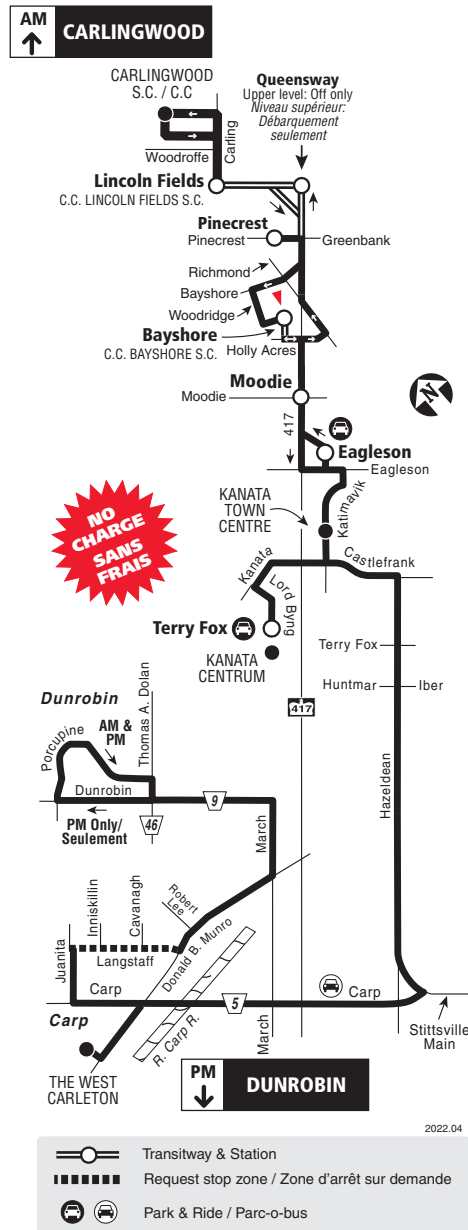
## CARLINGWOOD DUNROBIN, CARP

### Local

**Wednesday only / Mercredi seulement**

Selected time periods

Périodes sélectionnées



2022.04



**Schedule / Horaire .....613-560-1000**

**Text / Texto\* .....560560**

plus your four digit bus stop number / plus votre numéro d'arrêt à quatre chiffres

\*Standard message rates may apply / Les tarifs réguliers de messagerie texte peuvent s'appliquer

Customer Service

Service à la clientèle ..... **613-560-5000**

Lost and Found / Objets perdus ..... **613-563-4011**

Security / Sécurité ..... **613-741-2478**

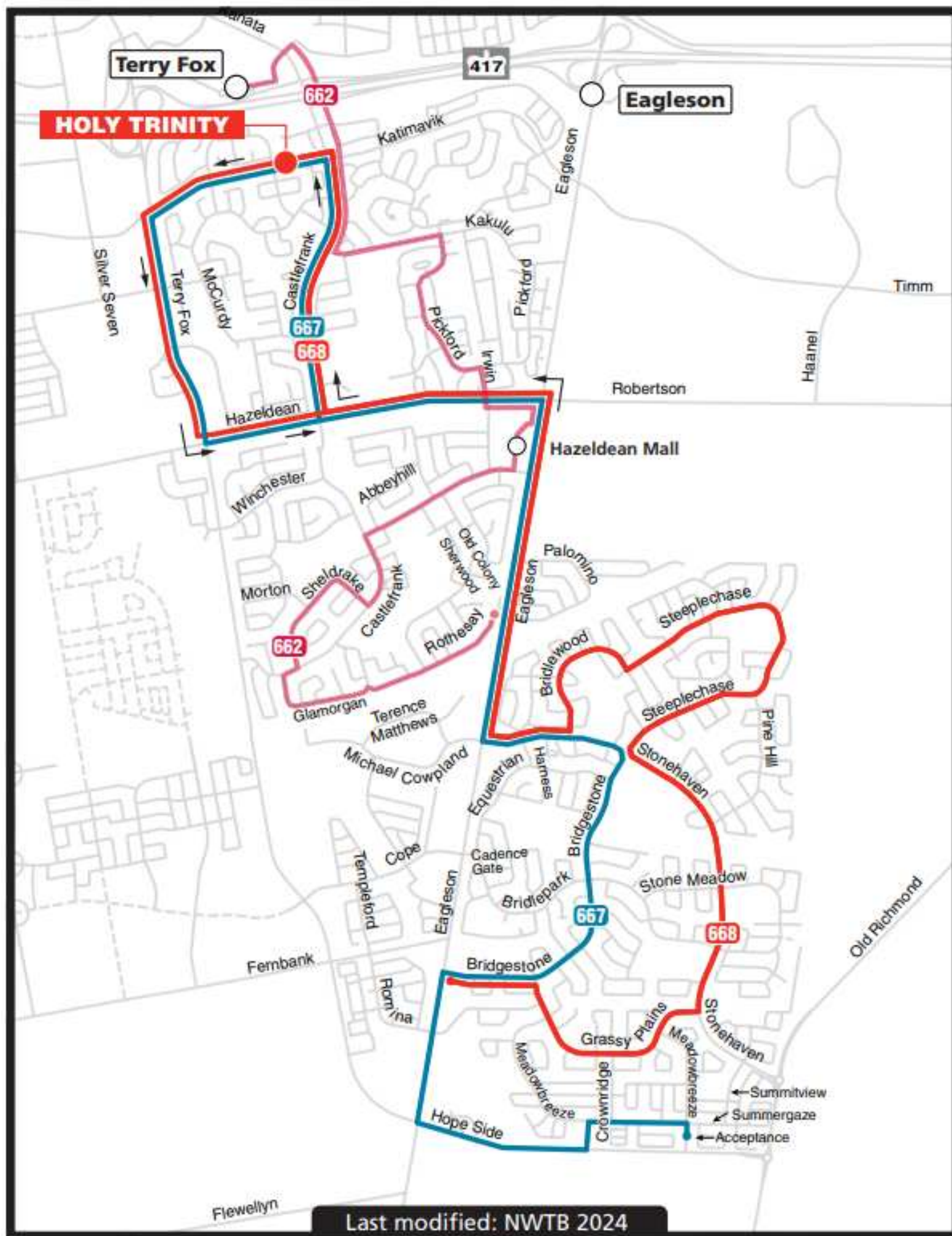
**Effective April 24, 2022**

**En vigueur 24 avril 2022**

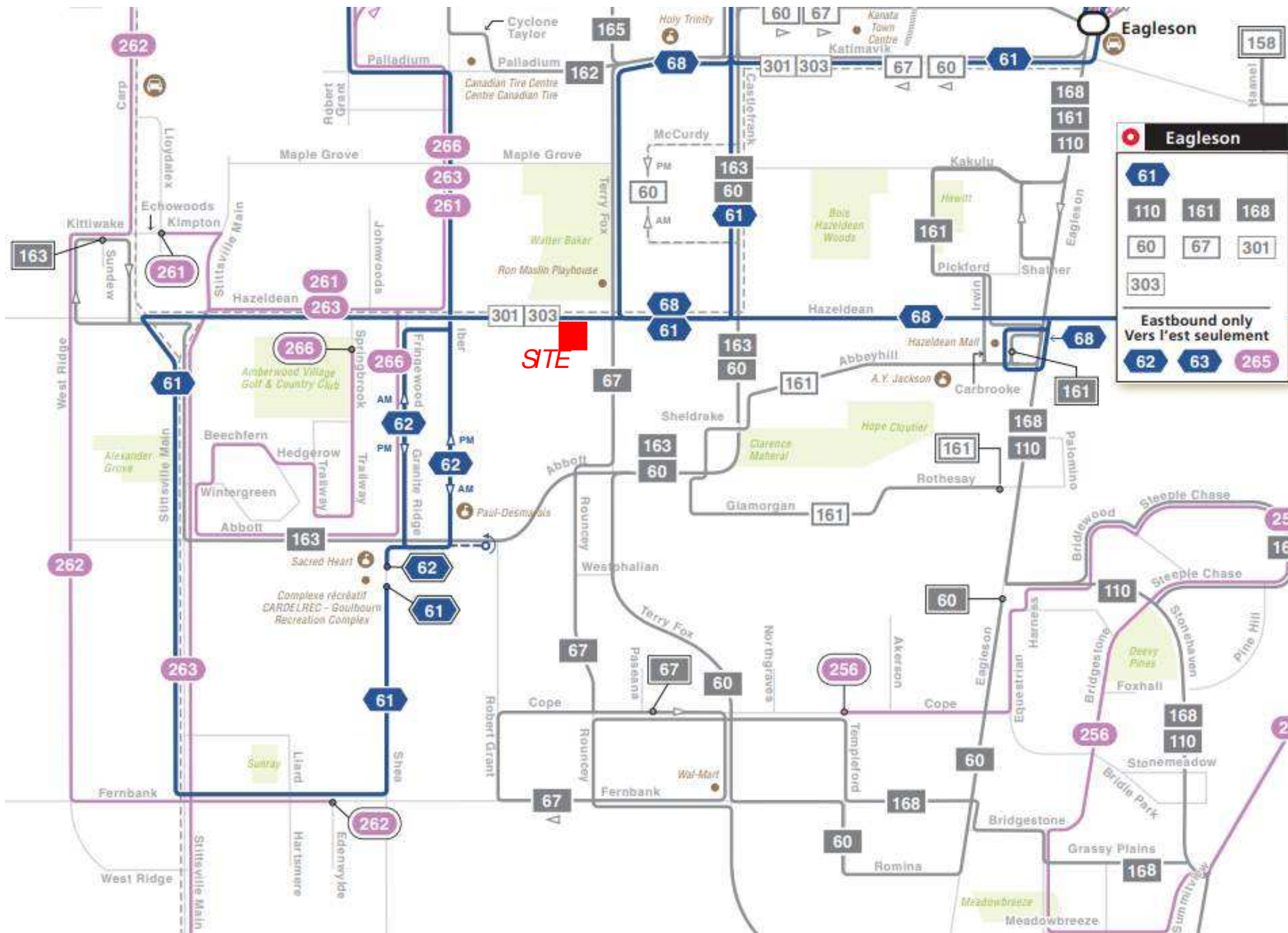


**INFO 613-560-5000**  
**octranspo.com**









## **APPENDIX D**

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### Traffic Count Data



## Transportation Services - Traffic Services

### Turning Movement Count - Peak Hour Diagram

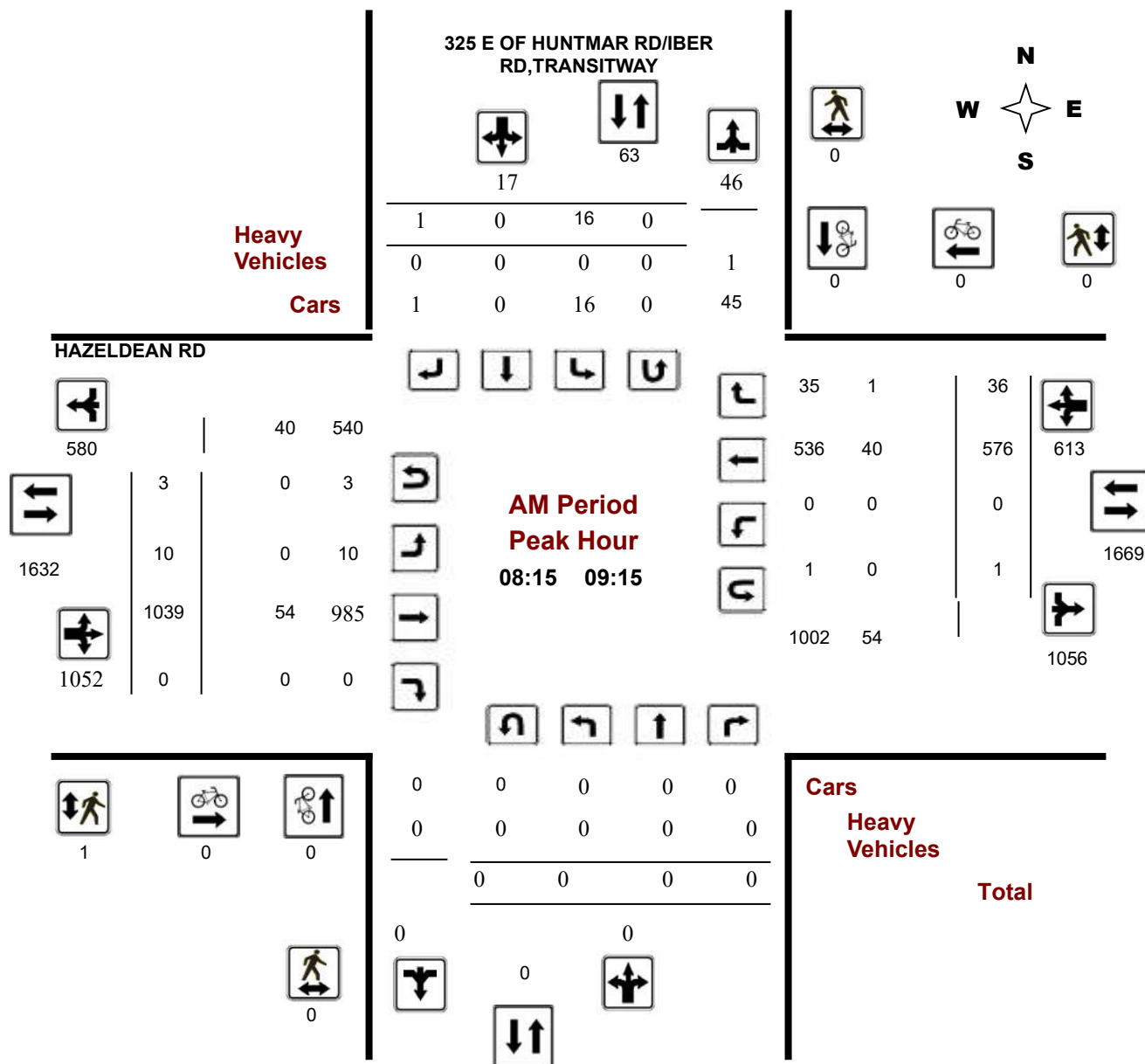
#### 325 E OF HUNTMAR RD/IBER RD,TRANSITWAY @ HAZELDEAN RD

**Survey Date:** Wednesday, March 04, 2020

**Start Time:** 07:00

**WO No:** 39582

**Device:** Miovision



**Comments** 5478573 - HAZELDEAN RD @ 325 E OF IBER RD/HUNTMAR RD/TRANSITWAY - MAR 4, 2020 - 8HRS - LORETTA





# Transportation Services - Traffic Services

## Turning Movement Count - Peak Hour Diagram

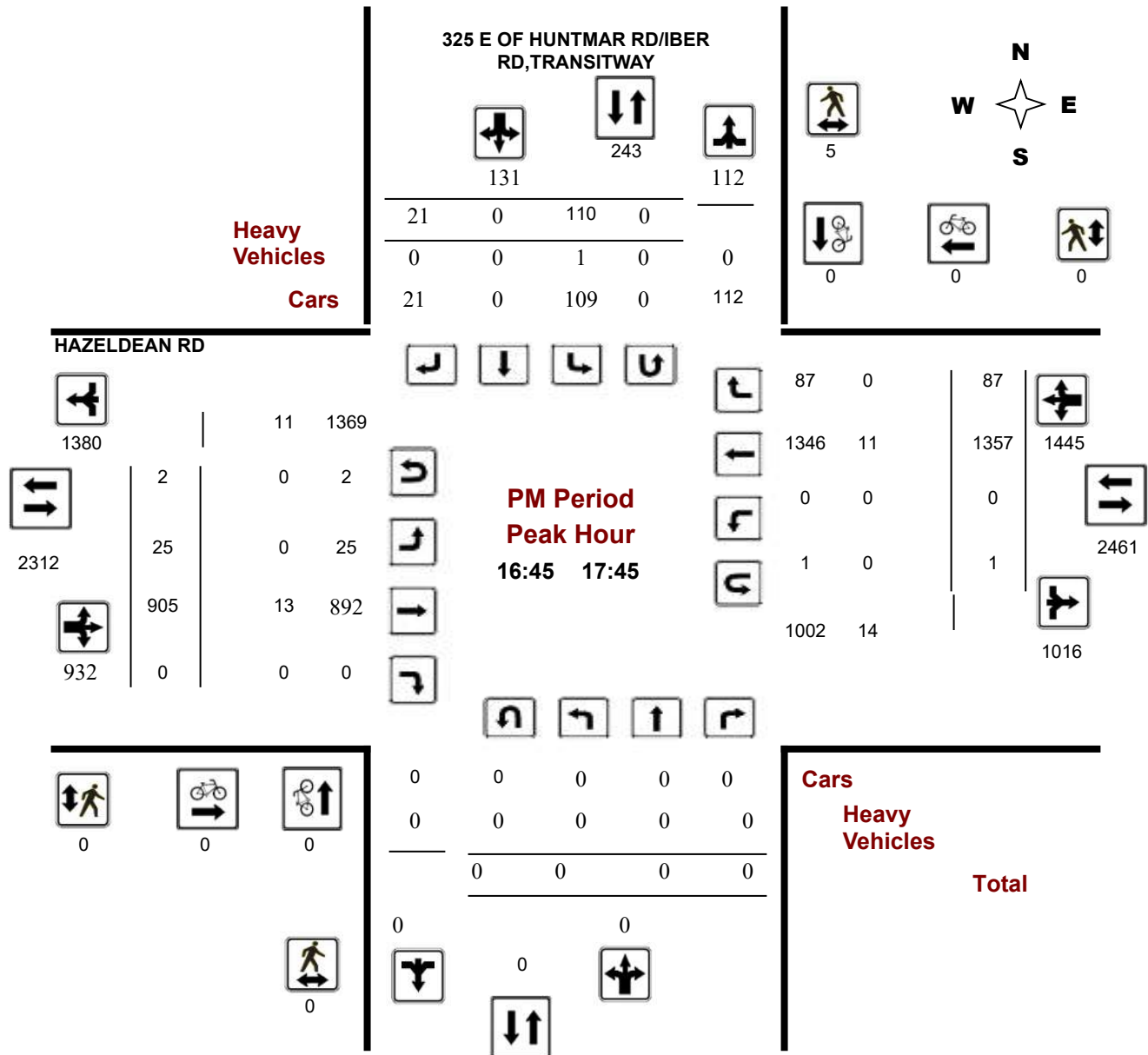
### 325 E OF HUNTMAR RD/IBER RD,TRANSITWAY @ HAZELDEAN RD

**Survey Date:** Wednesday, March 04, 2020

**Start Time:** 07:00

**WO No:** 39582

**Device:** Miovision



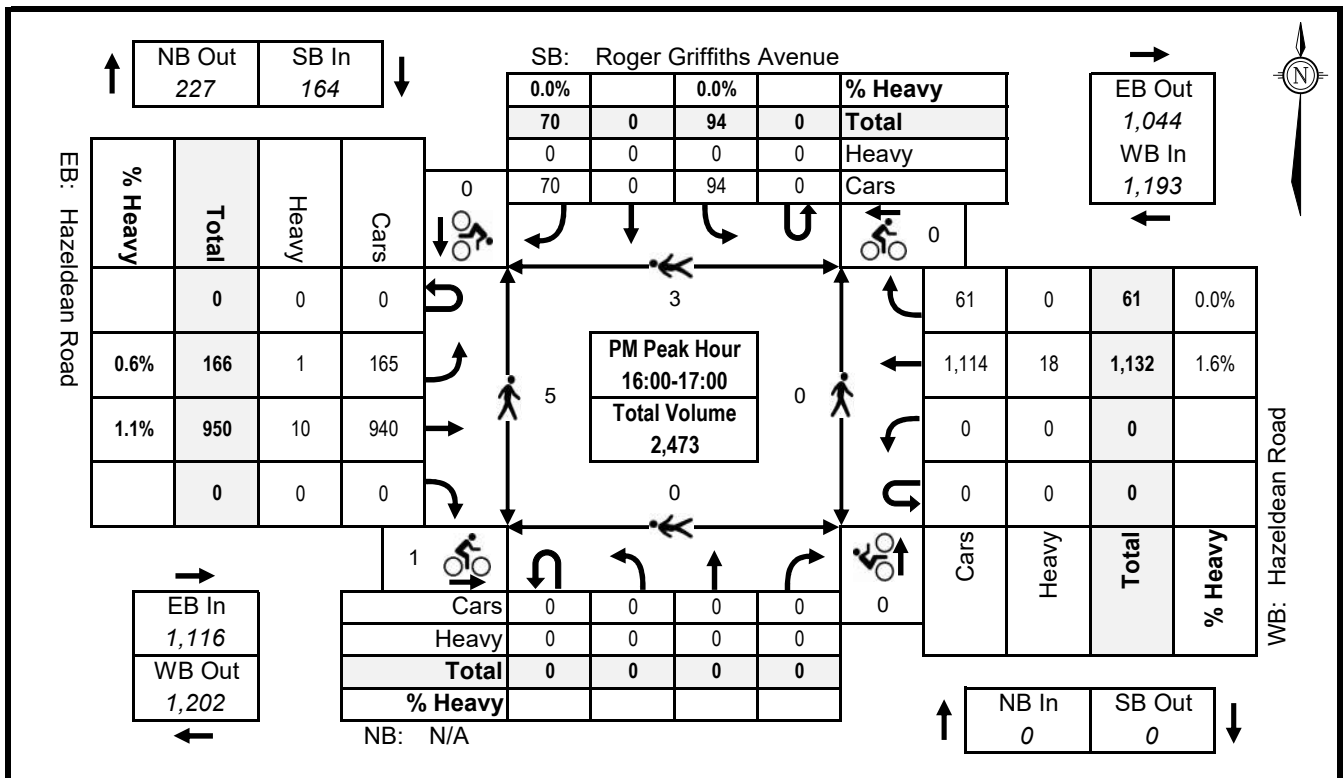
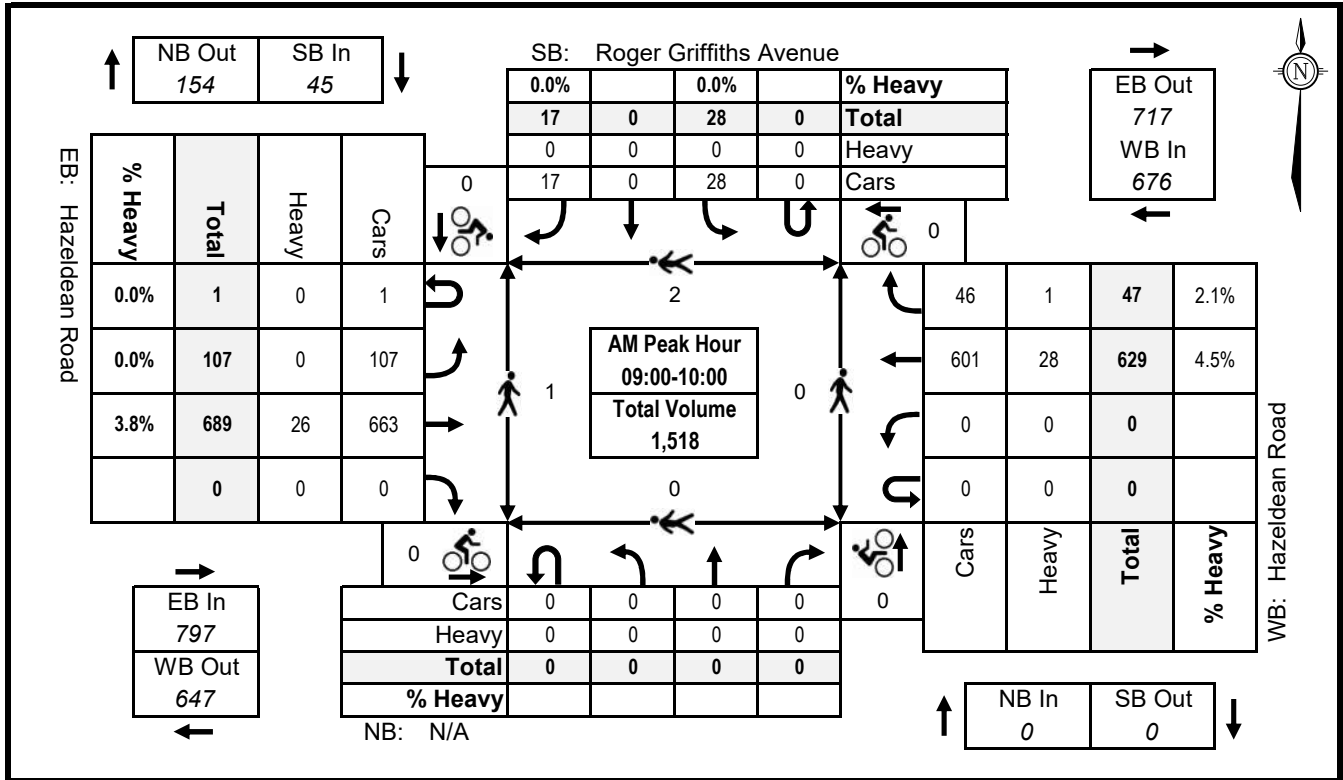
**Comments** 5478573 - HAZELDEAN RD @ 325 E OF IBER RD/HUNTMAR RD/TRANSITWAY - MAR 4, 2020 - 8HRS - LORETTA

# HAZELDEAN ROAD @ ROGER GRIFFITHS AVENUE

TURNING MOVEMENT COUNT  
PEAK HOUR SUMMARIES

Date:  
Survey Hours:  
Surveyor(s):

Wednesday, April 9, 2025  
07:00-10:00, 11:30-13:30, 15:00-18:00  
J.Morris, B.Cameron

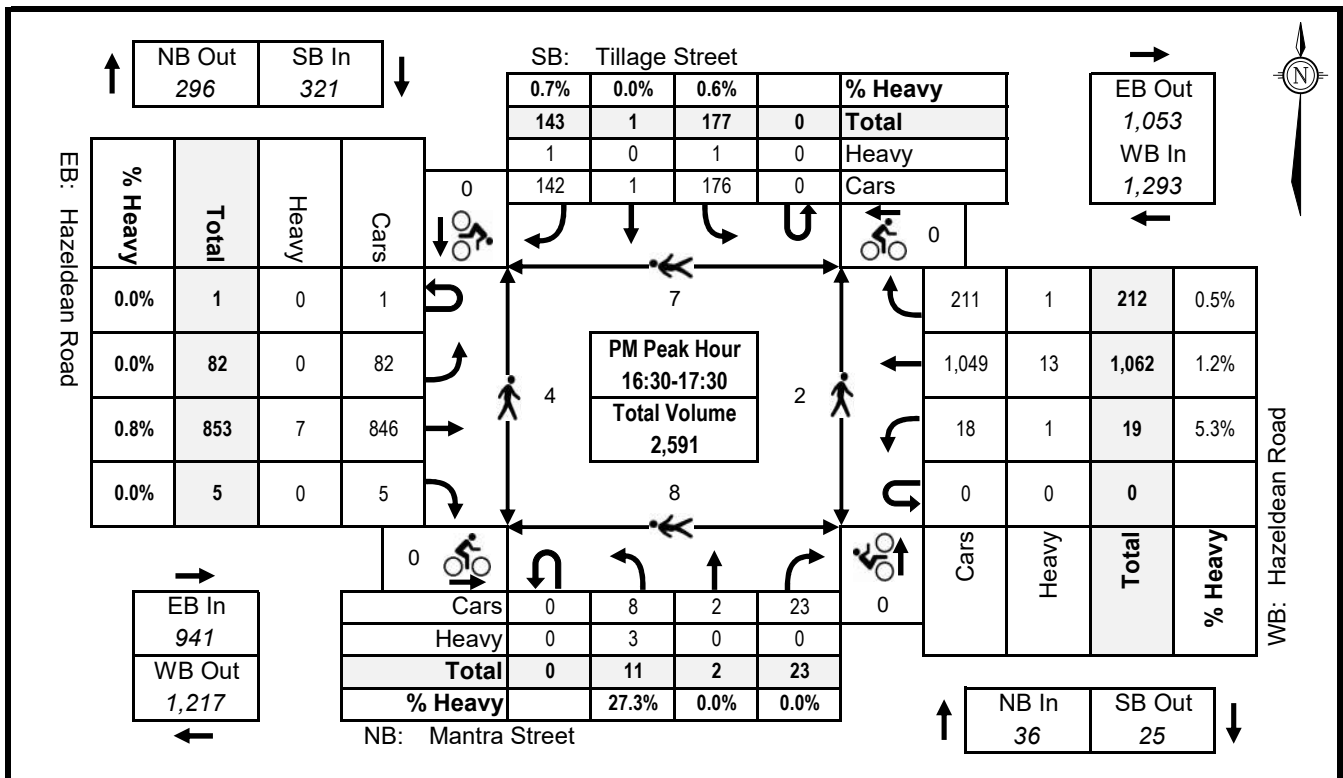
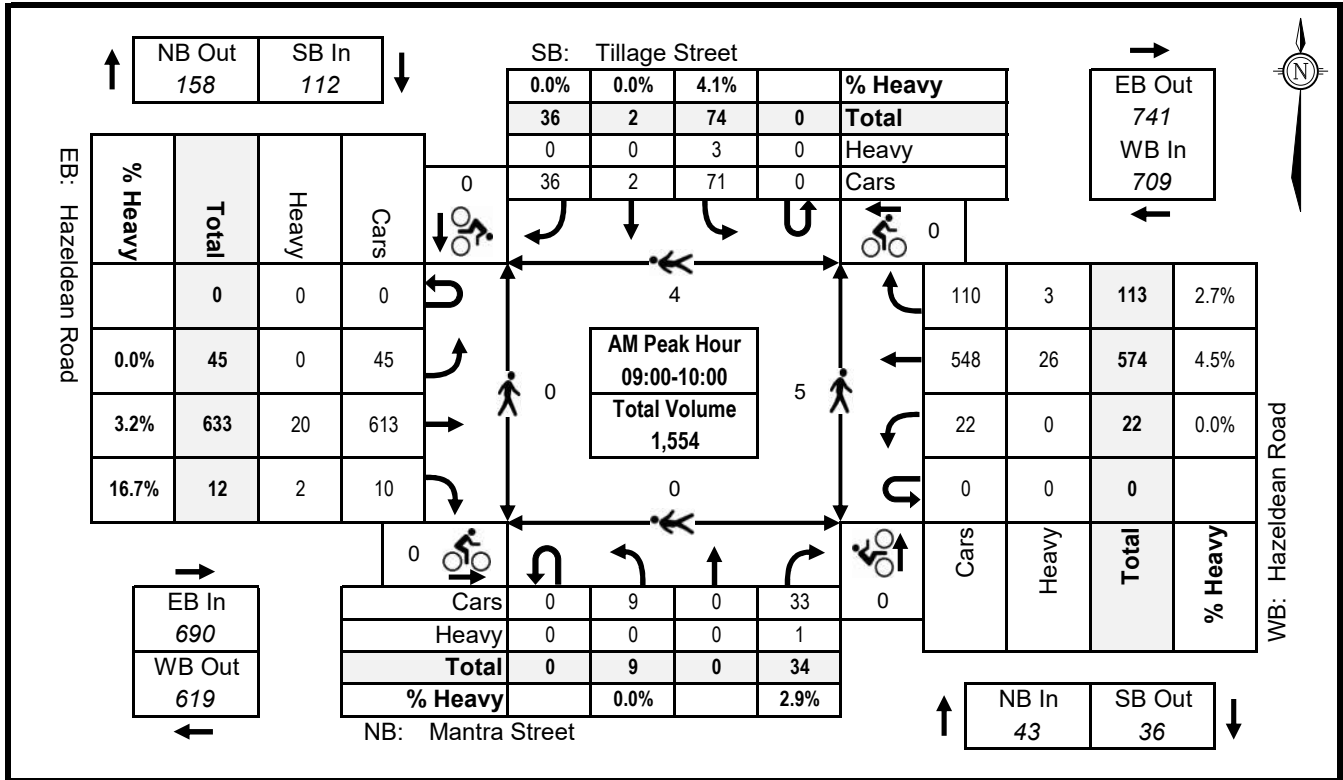


# HAZELDEAN ROAD @ MANTRA STREET/TILLAGE STREET

TURNING MOVEMENT COUNT  
PEAK HOUR SUMMARIES

Date:  
Survey Hours:  
Surveyor(s):

Wednesday, April 9, 2025  
07:00-10:00, 11:30-13:30, 15:00-18:00  
J.Morris, B.Cameron



## HAZELDEAN ROAD @ MANTRA STREET/TILLAGE STREET

### TURNING MOVEMENT COUNT 8-HOUR SUMMARY

**Date:** Wednesday, April 9, 2025  
**Survey Hours:** 07:00-10:00, 11:30-13:30, 15:00-18:00  
**Surveyor(s):** J.Morris, B.Cameron

| Period                                                                                                       | Mantra Street |    |     |     | Tillage Street |    |       |       |         | Hazeldean Road |        |     |        | Hazeldean Road |        |       |        |         |           |
|--------------------------------------------------------------------------------------------------------------|---------------|----|-----|-----|----------------|----|-------|-------|---------|----------------|--------|-----|--------|----------------|--------|-------|--------|---------|-----------|
|                                                                                                              | NORTHBOUND    |    |     |     | SOUTHBOUND     |    |       |       | N/S Tot | EASTBOUND      |        |     |        | WESTBOUND      |        |       |        | E/W Tot | Grand Tot |
|                                                                                                              | L             | T  | R   | Tot | L              | T  | R     | Tot   |         | L              | T      | R   | Tot    | L              | T      | R     | Tot    |         |           |
| 07:00 - 08:00                                                                                                | 4             | 0  | 25  | 29  | 18             | 0  | 10    | 28    | 57      | 12             | 725    | 9   | 746    | 36             | 486    | 25    | 547    | 1,293   | 1,350     |
| 08:00 - 09:00                                                                                                | 10            | 1  | 41  | 52  | 25             | 3  | 6     | 34    | 86      | 21             | 728    | 16  | 765    | 29             | 562    | 31    | 622    | 1,387   | 1,473     |
| 09:00 - 10:00                                                                                                | 9             | 0  | 34  | 43  | 74             | 2  | 36    | 112   | 155     | 45             | 633    | 12  | 690    | 22             | 574    | 113   | 709    | 1,399   | 1,554     |
| 11:30 - 12:30                                                                                                | 6             | 6  | 20  | 32  | 228            | 10 | 124   | 362   | 394     | 75             | 834    | 11  | 920    | 21             | 786    | 237   | 1,044  | 1,964   | 2,358     |
| 12:30 - 13:30                                                                                                | 7             | 0  | 18  | 25  | 208            | 2  | 136   | 346   | 371     | 82             | 839    | 11  | 932    | 14             | 852    | 216   | 1,082  | 2,014   | 2,385     |
| 15:00 - 16:00                                                                                                | 9             | 2  | 37  | 48  | 197            | 2  | 105   | 304   | 352     | 69             | 883    | 9   | 961    | 16             | 1,010  | 174   | 1,200  | 2,161   | 2,513     |
| 16:00 - 17:00                                                                                                | 12            | 1  | 28  | 41  | 185            | 0  | 112   | 297   | 338     | 73             | 936    | 11  | 1,020  | 22             | 1,039  | 166   | 1,227  | 2,247   | 2,585     |
| 17:00 - 18:00                                                                                                | 6             | 4  | 17  | 27  | 164            | 6  | 148   | 318   | 345     | 90             | 841    | 2   | 933    | 24             | 954    | 211   | 1,189  | 2,122   | 2,467     |
| Subtotal                                                                                                     | 63            | 14 | 220 | 297 | 1,099          | 25 | 677   | 1,801 | 2,098   | 467            | 6,419  | 81  | 6,967  | 184            | 6,263  | 1,173 | 7,620  | 14,587  | 16,685    |
| U-Turns                                                                                                      |               |    |     | 0   |                |    |       | 2     |         |                |        |     | 3      |                |        |       | 0      |         |           |
| Total                                                                                                        | 63            | 14 | 220 | 297 | 1,099          | 25 | 677   | 1,803 | 2,100   | 467            | 6,419  | 81  | 6,970  | 184            | 6,263  | 1,173 | 7,620  | 14,590  | 16,690    |
| Equivalent 12-hr                                                                                             | 88            | 19 | 306 | 413 | 1,528          | 35 | 941   | 2,506 | 2,919   | 649            | 8,922  | 113 | 9,687  | 256            | 8,706  | 1,630 | 10,592 | 20,279  | 23,198    |
| Expansion Factor: Calculated by multiplying the 8-hour totals by the 8- to 12-hour expansion factor of       |               |    |     |     |                |    |       |       |         |                |        |     |        | 1.39           |        |       |        |         |           |
| Average 12-hr                                                                                                | 79            | 17 | 275 | 372 | 1,375          | 32 | 847   | 2,255 | 2,627   | 584            | 8,030  | 102 | 8,718  | 230            | 7,835  | 1,467 | 9,533  | 18,251  | 20,878    |
| Expansion Factor: Calculated by multiplying the equivalent 12-hour totals by the month AADT factor of        |               |    |     |     |                |    |       |       |         |                |        |     |        | 0.90           |        |       |        |         |           |
| AADT 24-hr                                                                                                   | 103           | 22 | 360 | 487 | 1,801          | 42 | 1,110 | 2,954 | 3,441   | 765            | 10,519 | 134 | 11,421 | 301            | 10,264 | 1,922 | 12,488 | 23,909  | 27,350    |
| Expansion Factor: Calculated by multiplying the avg 12-hour totals by the 12- to 24-hour expansion factor of |               |    |     |     |                |    |       |       |         |                |        |     |        | 1.31           |        |       |        |         |           |

#### Notes

- Volumes include passenger vehicles and heavy vehicles (cyclists and pedestrians excluded)
- Volumes have been rounded where factors are applied (i.e. for the rows displaying equivalent 12-hr, average 12-hr, and AADT 24-hr volumes)

**Project No.:** 100057

## Turning Movement Count - Study Results

### HAZELDEAN RD @ TERRY FOX DR

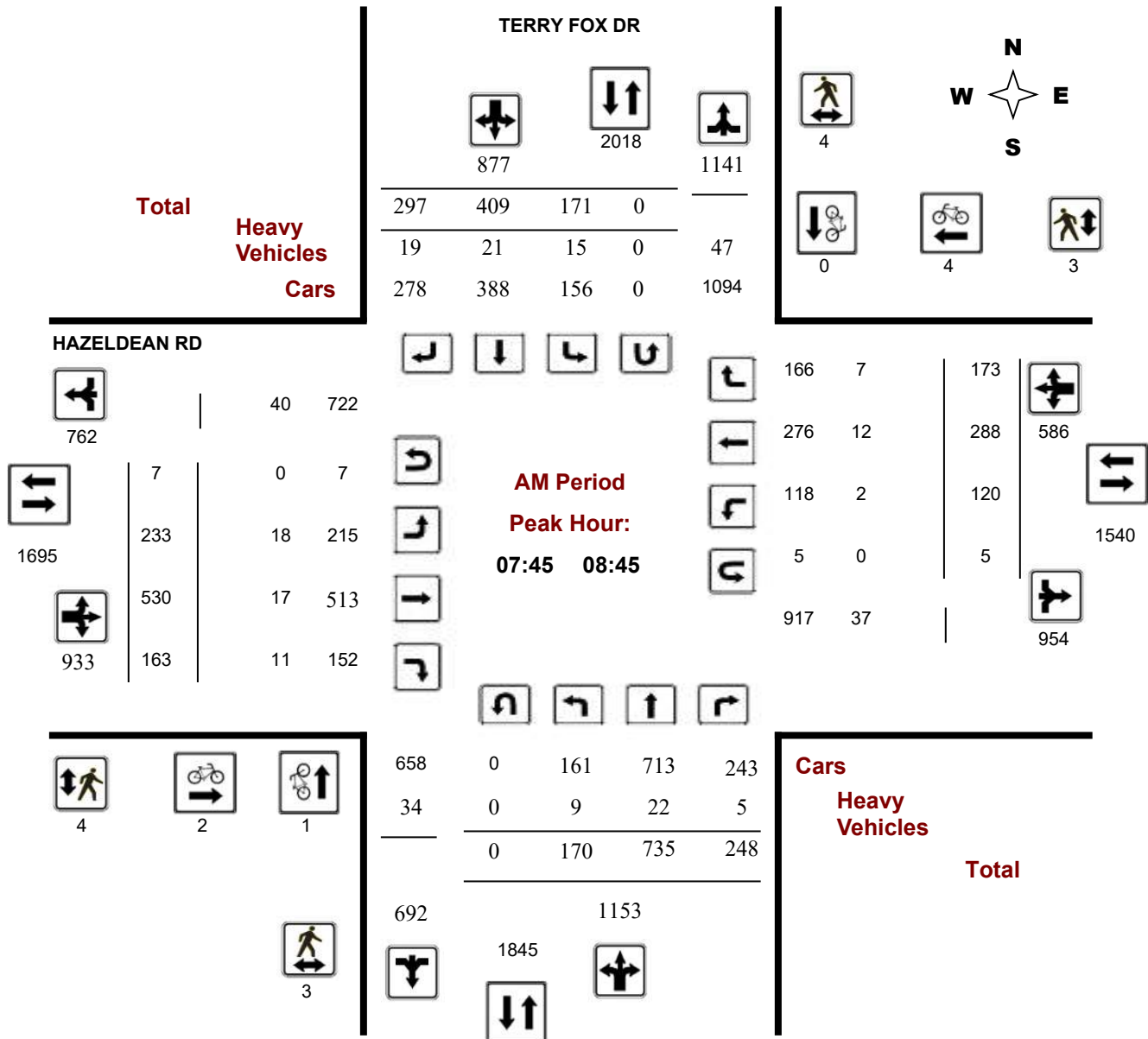
**Survey Date:** Tuesday, October 29, 2024

**WO No:** 42179

**Start Time:** 07:00

**Device:** Miovision

### AM Period Peak Hour Diagram



## Turning Movement Count - Study Results

### HAZELDEAN RD @ TERRY FOX DR

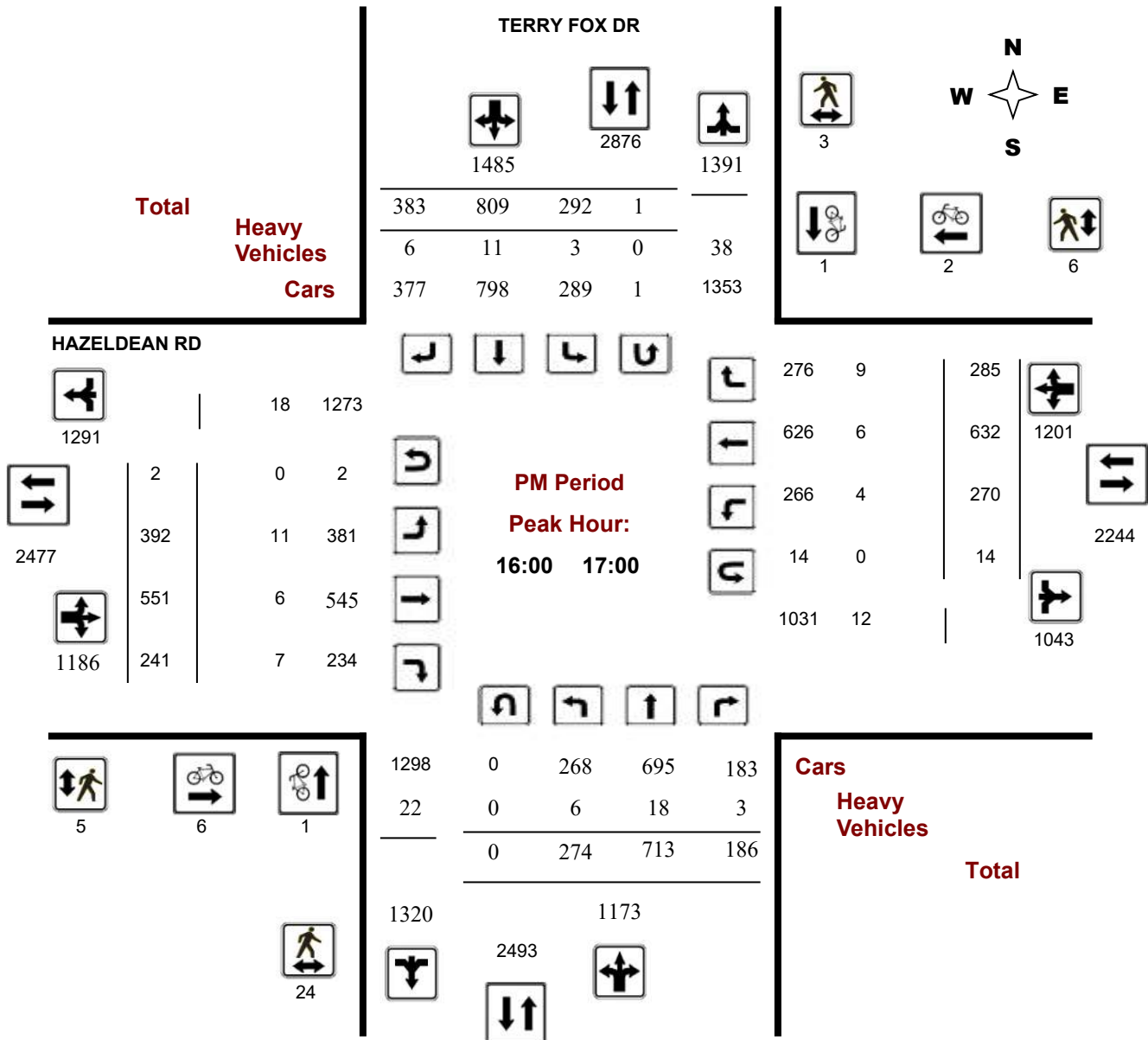
**Survey Date:** Tuesday, October 29, 2024

**WO No:** 42179

**Start Time:** 07:00

**Device:** Miovision

### PM Period Peak Hour Diagram

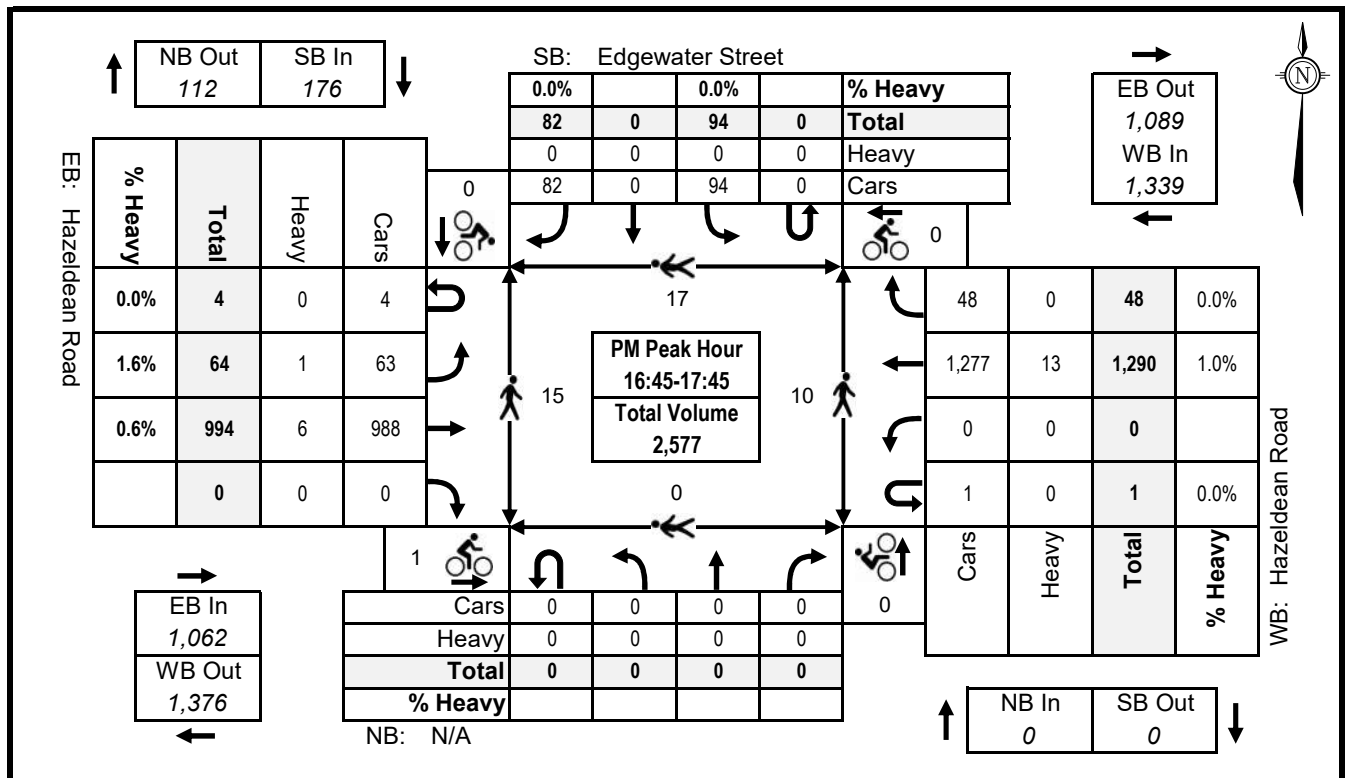
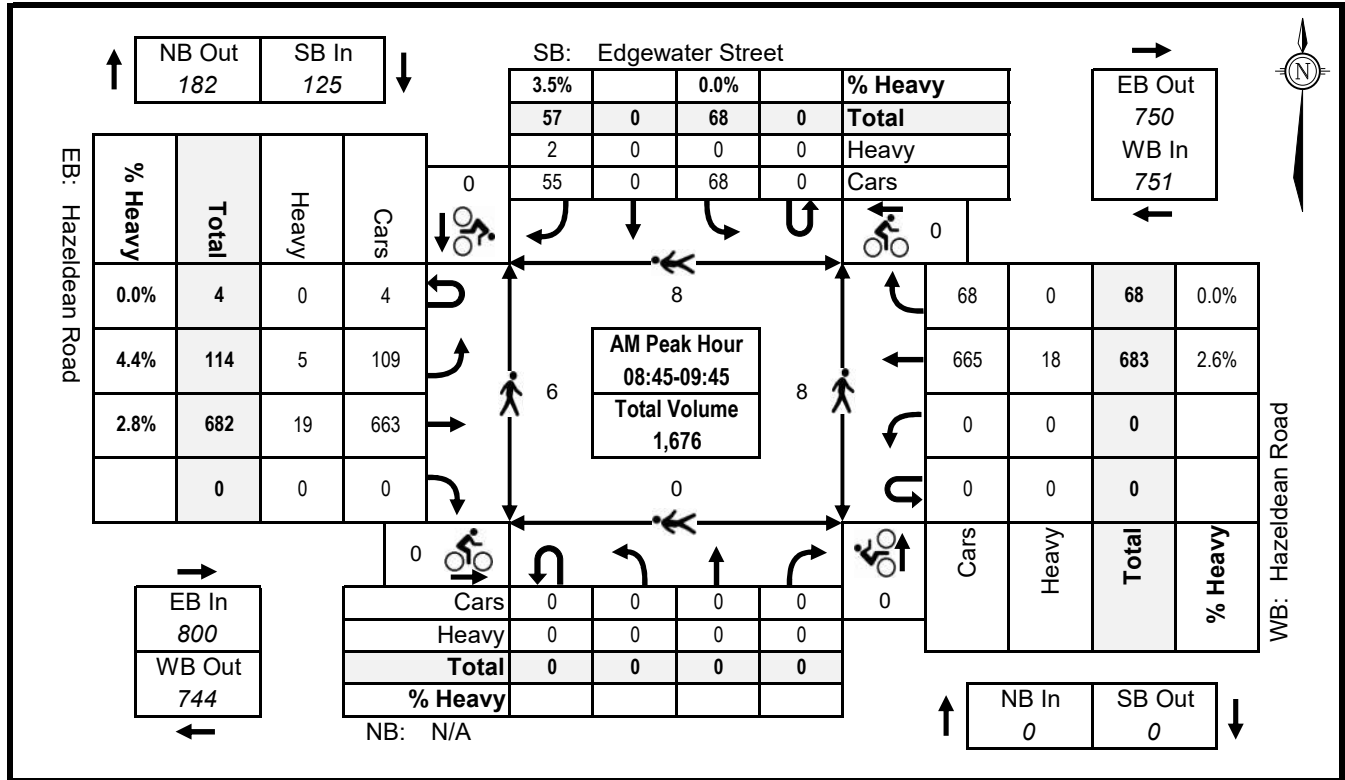


# HAZELDEAN ROAD @ EDGEWATER STREET

TURNING MOVEMENT COUNT  
PEAK HOUR SUMMARIES

Date:  
Survey Hours:  
Surveyor(s):

Thursday, April 10, 2025  
07:00-10:00, 11:30-13:30, 15:00-18:00  
J.Morris, B.Cameron

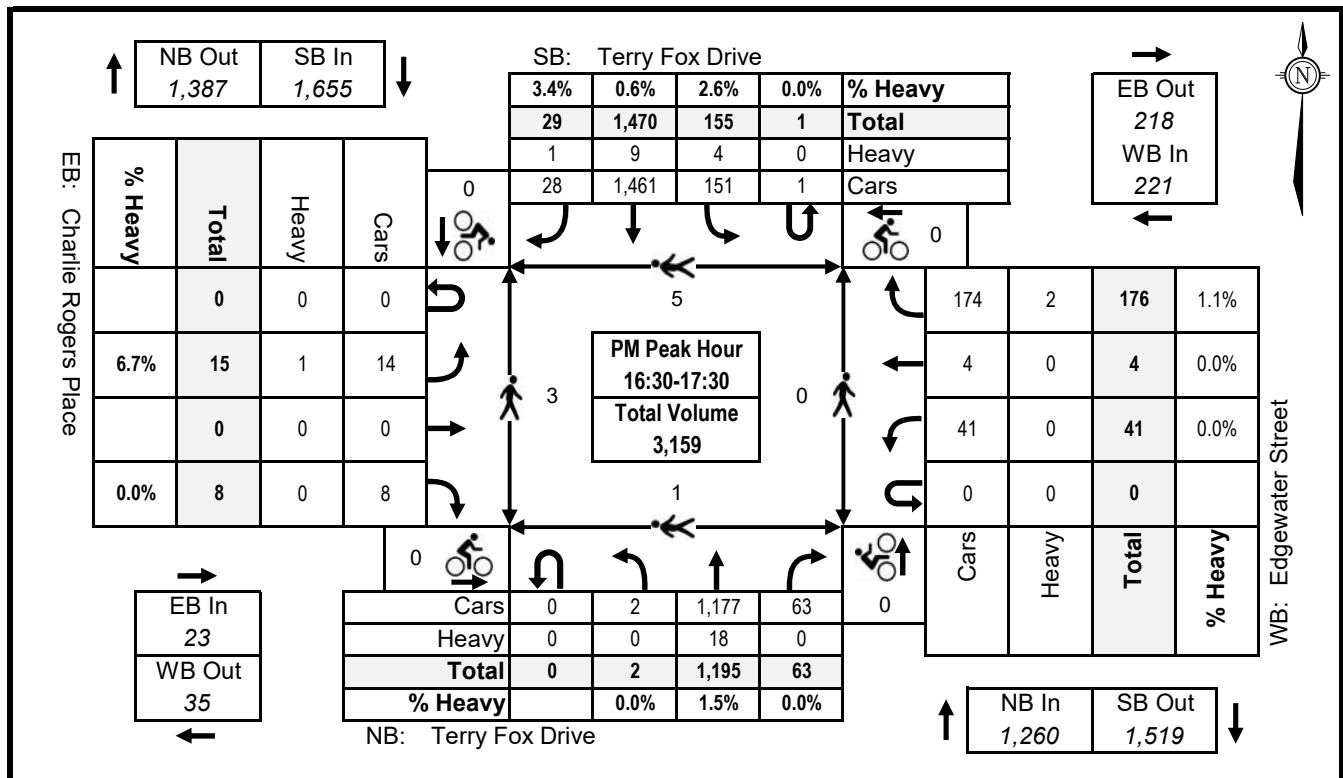
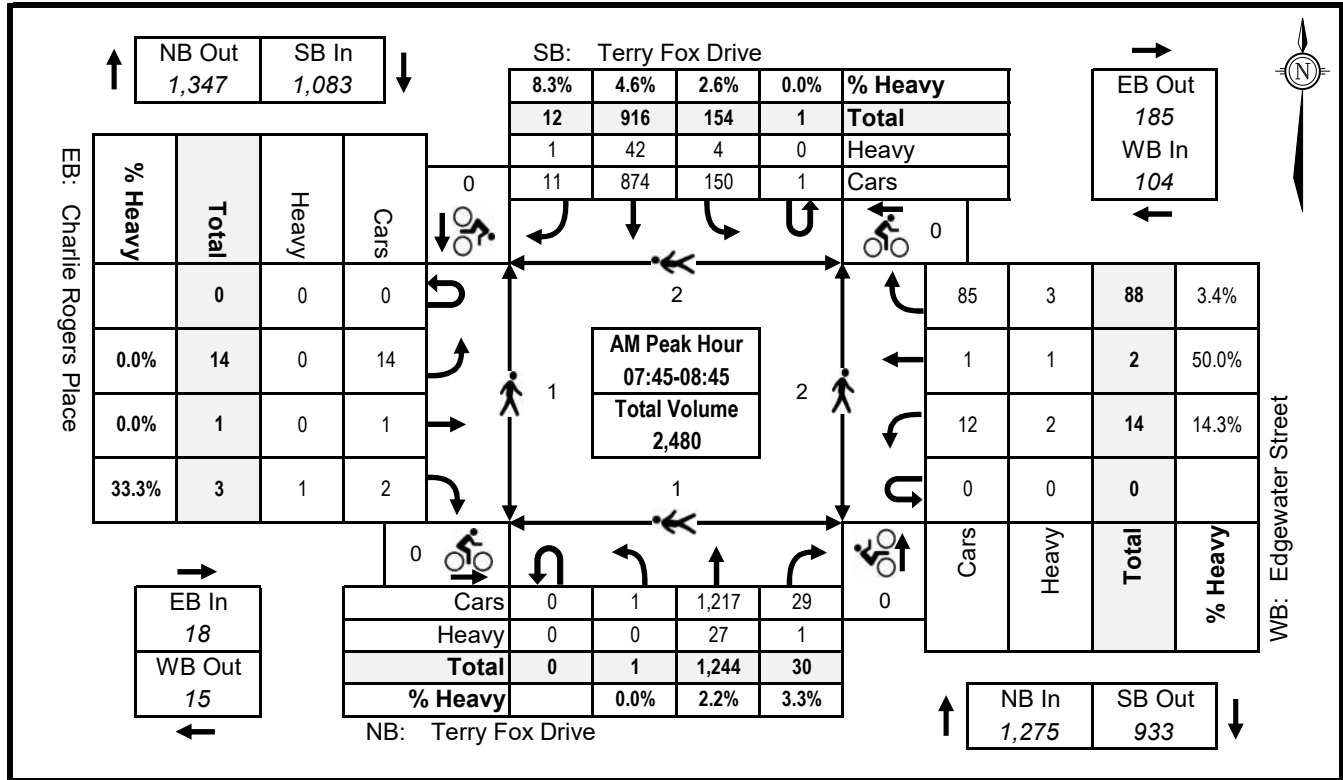


# TERRY FOX DRIVE @ EDGEWATER STREET/CHARLIE ROGERS PLACE

TURNING MOVEMENT COUNT  
PEAK HOUR SUMMARIES

Date:  
Survey Hours:  
Surveyor(s):

Thursday, April 10, 2025  
07:00-10:00, 11:30-13:30, 15:00-18:00  
J.Morris, B.Cameron





## Turning Movement Count - Study Results

### TERRY FOX DR @ 240 S OF EDGEWATER ST

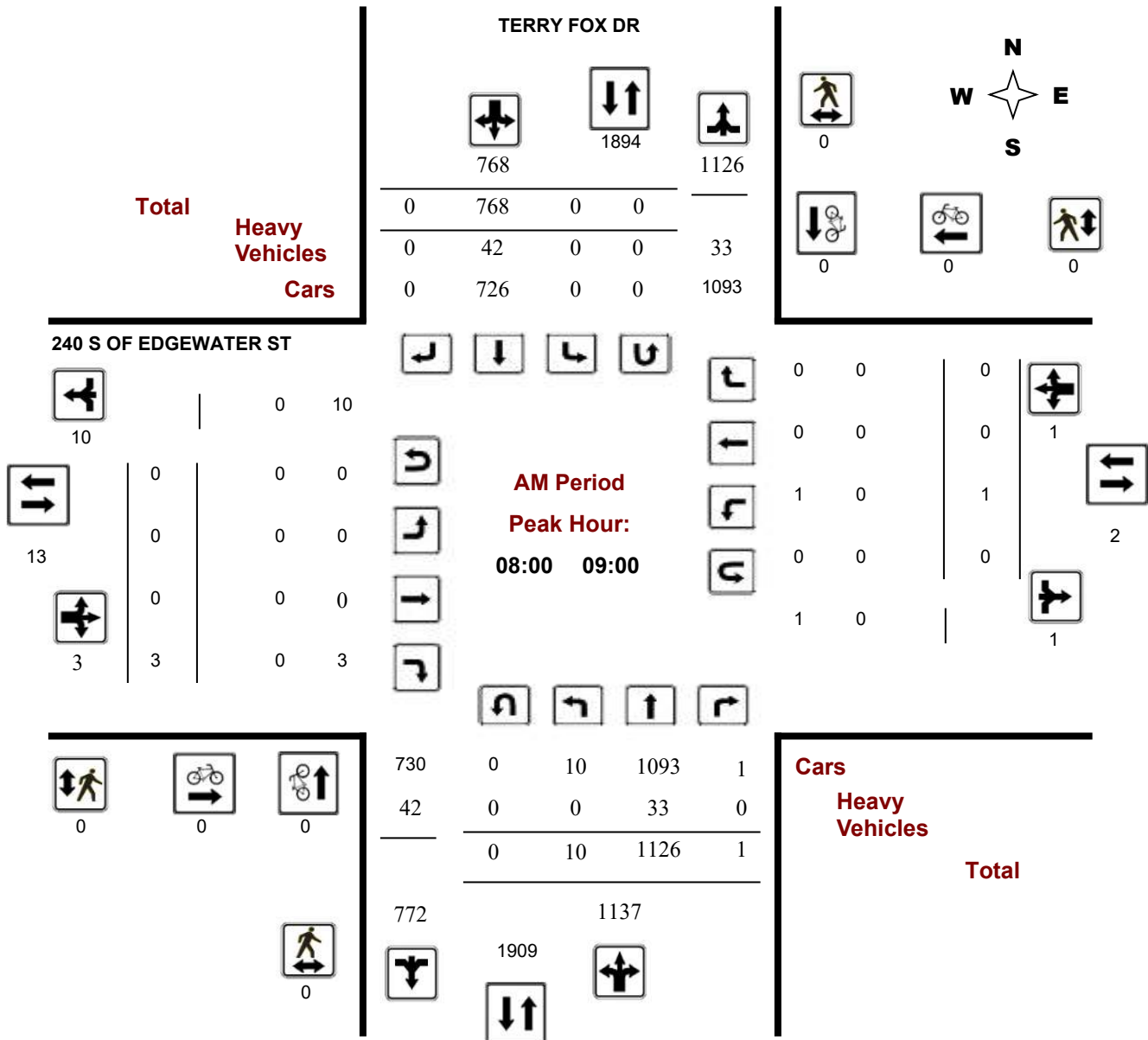
**Survey Date:** Tuesday, January 30, 2024

**WO No:** 41634

**Start Time:** 07:00

**Device:** Miovision

### AM Period Peak Hour Diagram



## Turning Movement Count - Study Results

**TERRY FOX DR @ 240 S OF EDGEWATER ST**

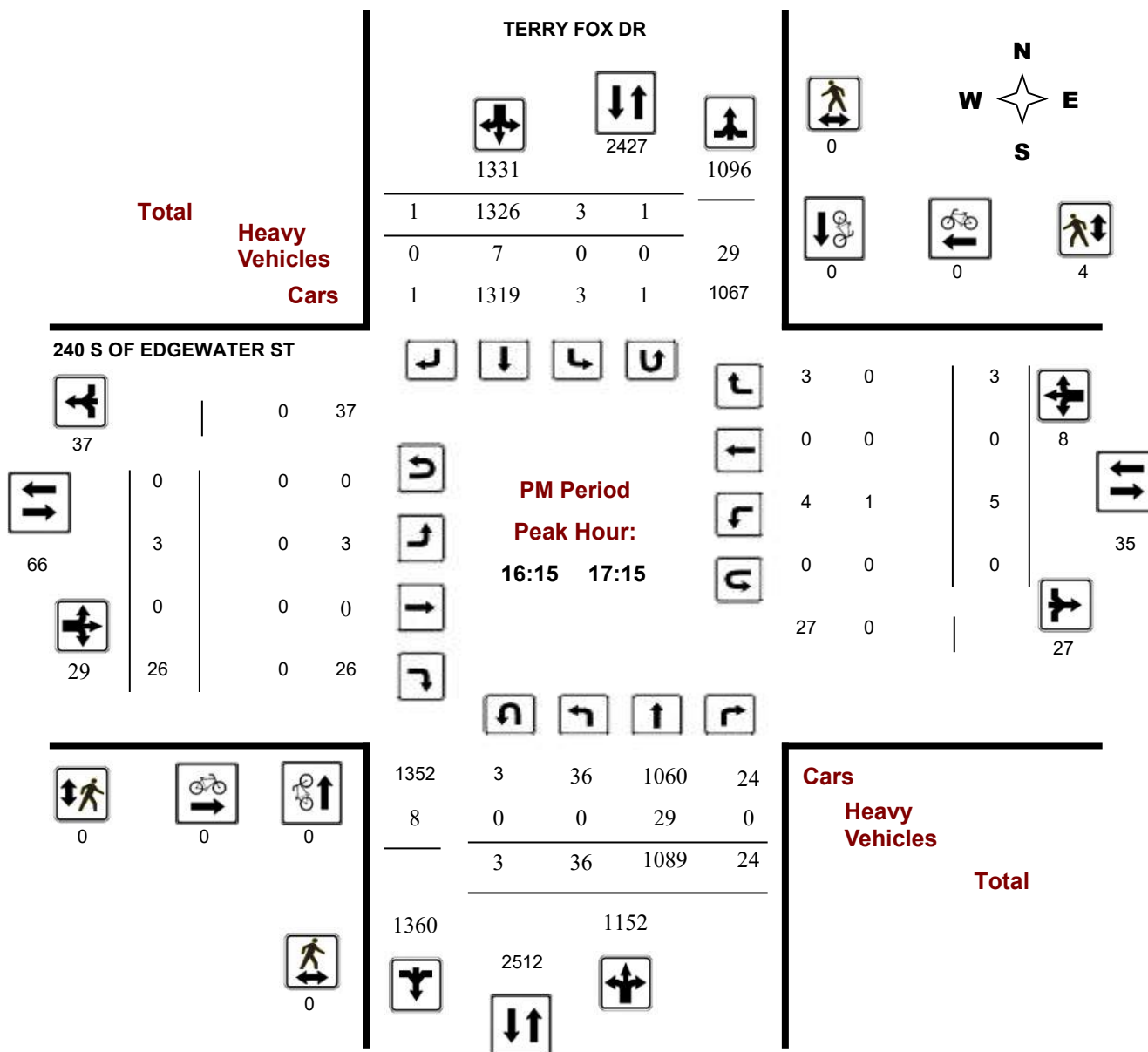
**Survey Date:** Tuesday, January 30, 2024

**WO No:** 41634

**Start Time:** 07:00

Device: Miovision

### PM Period Peak Hour Diagram

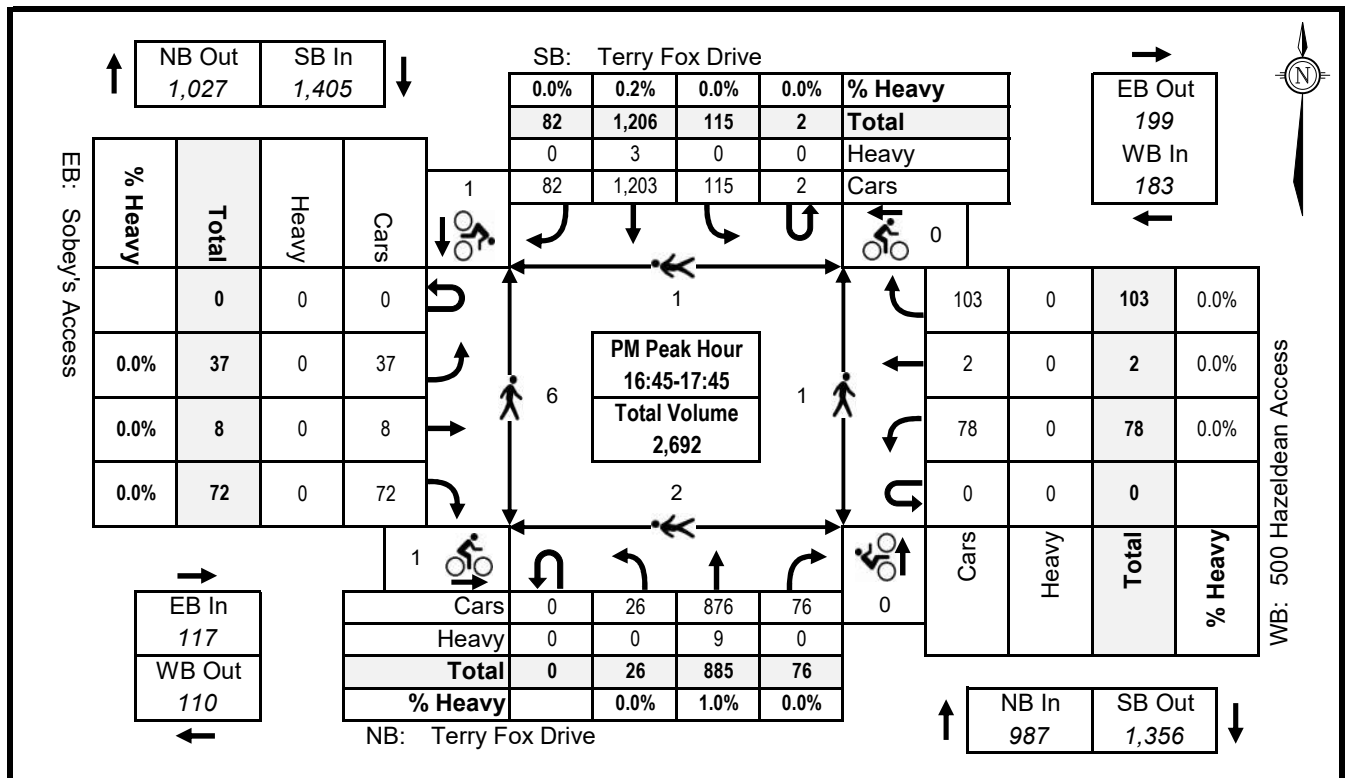
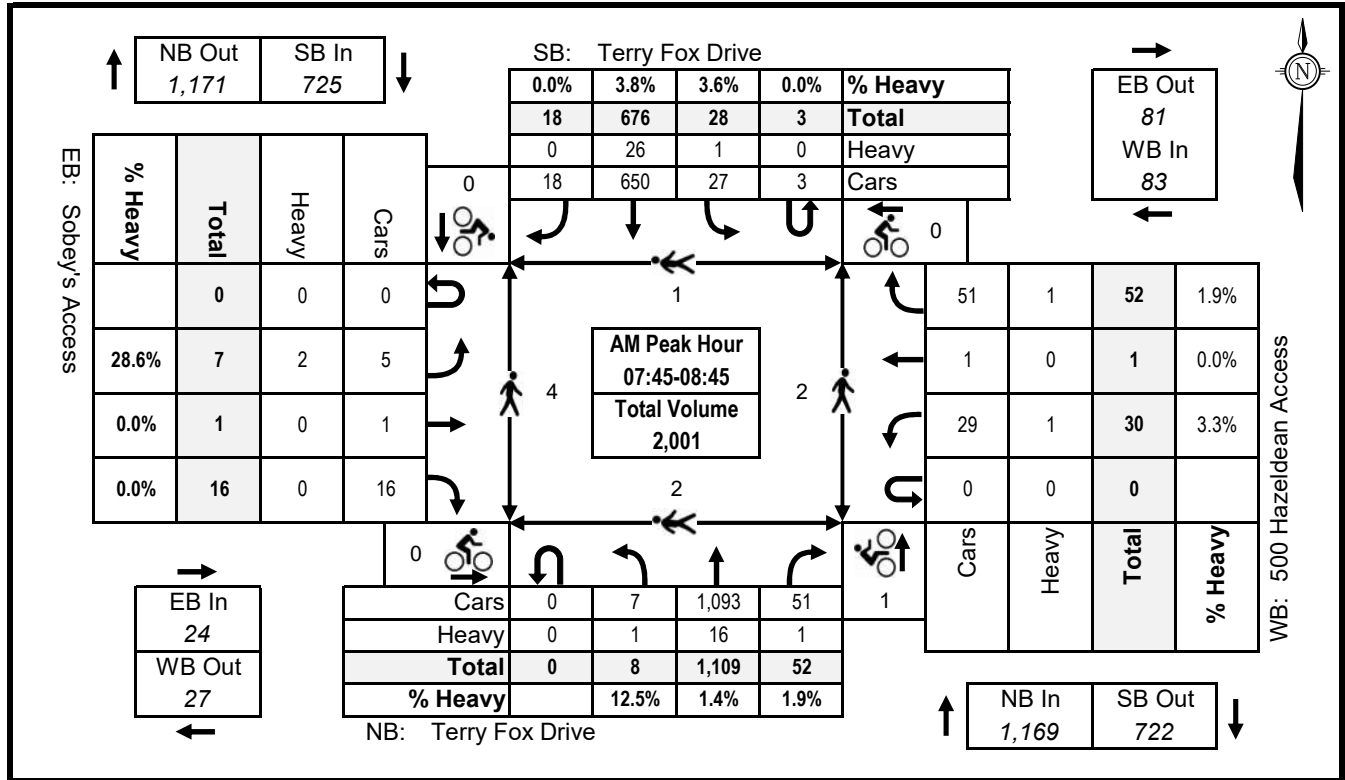


# TERRY FOX DRIVE @ 130 S OF HAZELDEAN ROAD

TURNING MOVEMENT COUNT  
PEAK HOUR SUMMARIES

Date:  
Survey Hours:  
Surveyor(s):

Thursday, April 10, 2025  
07:00-10:00, 11:30-13:30, 15:00-18:00  
J.Morris, B.Cameron



### TURNING MOVEMENT COUNT PEAK HOUR SUMMARIES

Date:

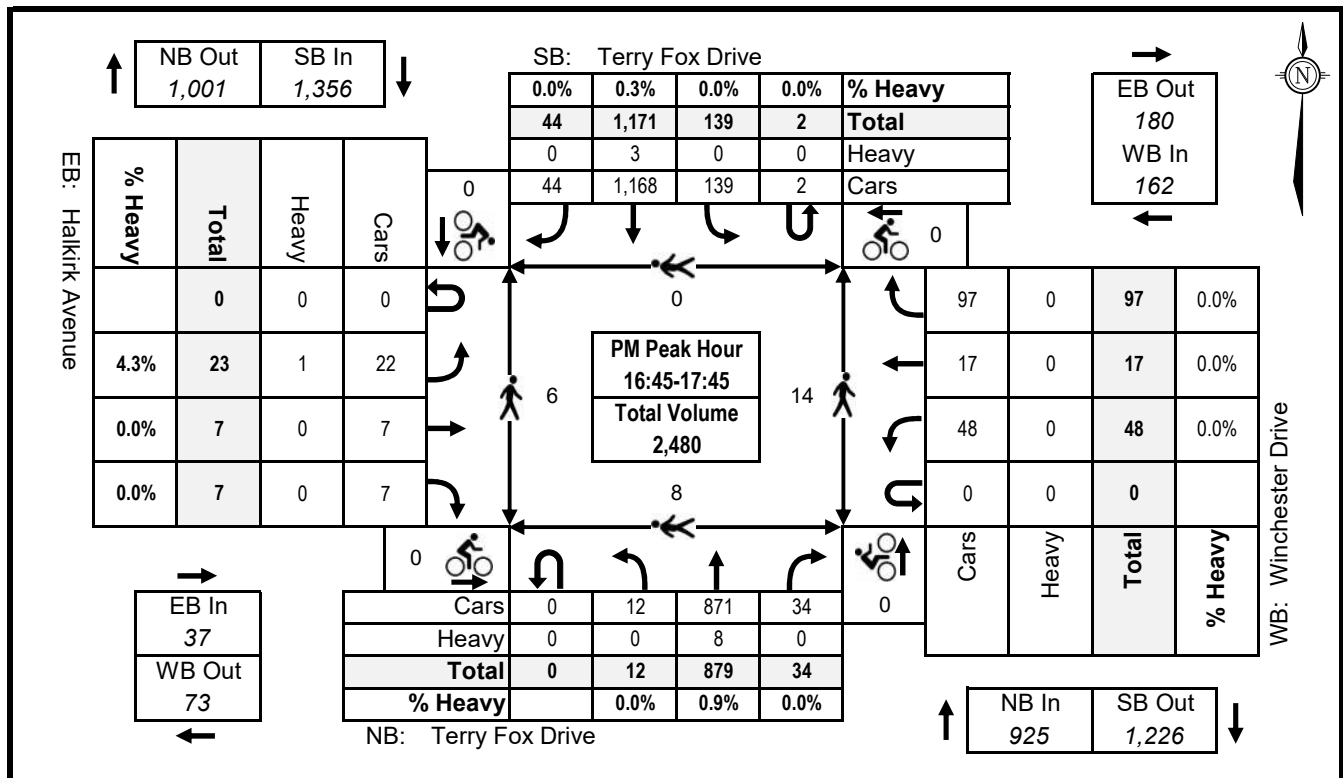
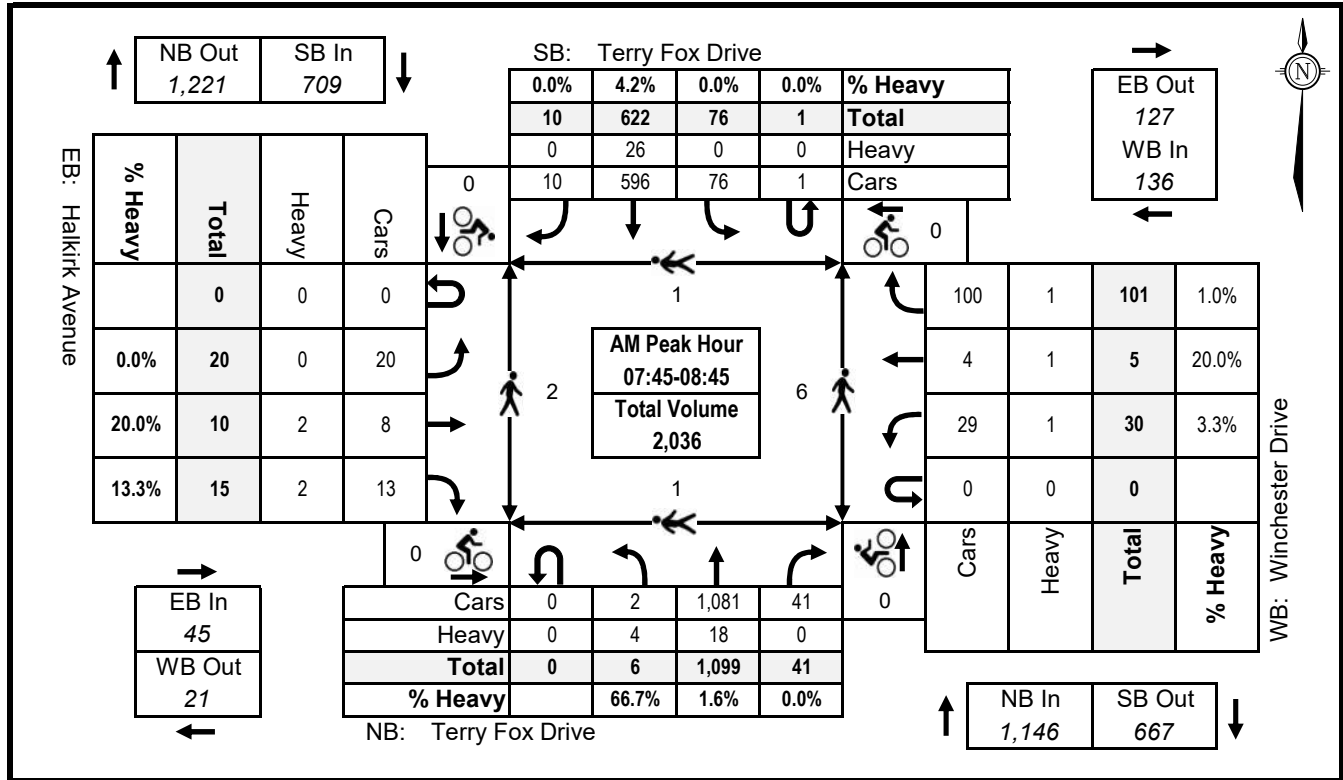
Thursday, April 10, 2025

Survey Hours:

07:00-10:00, 11:30-13:30, 15:00-18:00

Surveyor(s):

J.Morris, B.Cameron





Engineers, Planners & Landscape Architects

# TERRY FOX DRIVE @ WINCHESTER DRIVE/HALKIRK AVENUE

TURNING MOVEMENT COUNT  
8-HOUR SUMMARY (HEAVIES)

**Date:** Thursday, April 10, 2025  
**Survey Hours:** 07:00-10:00, 11:30-13:30, 15:00-18:00  
**Surveyor(s):** J.Morris, B.Cameron

| Period        | Terry Fox Drive |     |   |     | Terry Fox Drive |    |   |     |     | Halkirk Avenue |   |   |     | Winchester Drive |   |   |     |     |       |
|---------------|-----------------|-----|---|-----|-----------------|----|---|-----|-----|----------------|---|---|-----|------------------|---|---|-----|-----|-------|
|               | NORTHBOUND      |     |   |     | SOUTHBOUND      |    |   |     | N/S | EASTBOUND      |   |   |     | WESTBOUND        |   |   |     | E/W | Grand |
|               | L               | T   | R | Tot | L               | T  | R | Tot | Tot | L              | T | R | Tot | L                | T | R | Tot | Tot | Tot   |
| 07:00 - 08:00 | 1               | 22  | 1 | 24  | 0               | 27 | 2 | 29  | 53  | 0              | 1 | 0 | 1   | 0                | 0 | 0 | 0   | 1   | 54    |
| 08:00 - 09:00 | 4               | 16  | 0 | 20  | 0               | 22 | 1 | 23  | 43  | 0              | 2 | 3 | 5   | 3                | 1 | 1 | 5   | 10  | 53    |
| 09:00 - 10:00 | 0               | 17  | 4 | 21  | 1               | 9  | 0 | 10  | 31  | 0              | 1 | 0 | 1   | 3                | 0 | 4 | 7   | 8   | 39    |
| 11:30 - 12:30 | 0               | 11  | 0 | 11  | 0               | 9  | 0 | 9   | 20  | 0              | 0 | 0 | 0   | 0                | 0 | 0 | 0   | 0   | 20    |
| 12:30 - 13:30 | 0               | 12  | 0 | 12  | 0               | 8  | 0 | 8   | 20  | 0              | 0 | 0 | 0   | 0                | 0 | 0 | 0   | 0   | 20    |
| 15:00 - 16:00 | 1               | 17  | 1 | 19  | 5               | 14 | 0 | 19  | 38  | 0              | 0 | 3 | 3   | 4                | 6 | 0 | 10  | 13  | 51    |
| 16:00 - 17:00 | 0               | 18  | 0 | 18  | 1               | 5  | 1 | 7   | 25  | 0              | 0 | 1 | 1   | 0                | 0 | 0 | 0   | 1   | 26    |
| 17:00 - 18:00 | 0               | 7   | 0 | 7   | 0               | 3  | 0 | 3   | 10  | 1              | 0 | 0 | 1   | 0                | 0 | 0 | 0   | 1   | 11    |
| Subtotal      | 6               | 120 | 6 | 132 | 7               | 97 | 4 | 108 | 240 | 1              | 4 | 7 | 12  | 10               | 7 | 5 | 22  | 34  | 274   |
| U-Turns       |                 |     |   | 0   |                 |    |   | 0   |     |                |   |   | 0   |                  |   |   | 0   |     |       |
| Total         | 6               | 120 | 6 | 132 | 7               | 97 | 4 | 108 | 240 | 1              | 4 | 7 | 12  | 10               | 7 | 5 | 22  | 34  | 274   |

Project No.: 100057

## **APPENDIX E**

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### Collision Records

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** 325 E OF HUNTMAR RD/IBER RD @ HAZELDEAN RD

**Traffic Control:** Traffic signal

**Total Collisions:** 3

| Date/Day/Time          | Environment | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|------------------|------------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2019-Jan-26, Sat,17:15 | Clear       | Rear end         | P.D. only        | Dry            | East     | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | East     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2020-Mar-06, Fri,09:53 | Snow        | Turning movement | Non-fatal injury | Wet            | East     | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
|                        |             |                  |                  |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2020-Dec-01, Tue,17:18 | Rain        | Angle            | Non-fatal injury | Wet            | East     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Turning left        | Pick-up truck             | Other motor vehicle |         |

**Location:** HAZELDEAN RD @ EDGEWATER ST

**Traffic Control:** Traffic signal

**Total Collisions:** 18

| Date/Day/Time          | Environment   | Impact Type      | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|---------------|------------------|----------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2018-Jan-04, Thu,16:00 | Clear         | Angle            | P.D. only      | Loose snow     | West     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                |                | South    | Turning left        | Automobile, station wagon | Other motor vehicle |         |
| 2018-May-04, Fri,14:00 | Rain          | Turning movement | P.D. only      | Wet            | East     | Turning left        | Unknown                   | Other motor vehicle | 0       |
|                        |               |                  |                |                | West     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2018-Aug-21, Tue,15:40 | Rain          | Sideswipe        | P.D. only      | Wet            | West     | Changing lanes      | Automobile, station wagon | Skidding/sliding    | 0       |
|                        |               |                  |                |                | West     | Slowing or stopping | Automobile, station wagon | Other motor vehicle |         |
| 2018-Sep-13, Thu,08:19 | Clear         | Rear end         | P.D. only      | Dry            | South    | Going ahead         | Truck - dump              | Other motor vehicle | 0       |
|                        |               |                  |                |                | South    | Slowing or stopping | Passenger van             | Other motor vehicle |         |
| 2018-Dec-10, Mon,09:05 | Clear         | Rear end         | P.D. only      | Dry            | East     | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                |                | East     | Turning left        | Automobile, station wagon | Other motor vehicle |         |
| 2019-Mar-30, Sat,10:51 | Freezing Rain | Rear end         | P.D. only      | Ice            | West     | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                |                | West     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
|                        |               |                  |                |                | West     | Stopped             | Automobile, station wagon | Other motor vehicle |         |

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** HAZELDEAN RD @ EDGEWATER ST

**Traffic Control:** Traffic signal

**Total Collisions:** 18

| Date/Day/Time          | Environment | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|------------------|------------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2019-Apr-10, Wed,08:52 | Clear       | Angle            | Non-fatal injury | Wet            | South    | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
|                        |             |                  |                  |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2019-Oct-18, Fri,17:45 | Clear       | Rear end         | P.D. only        | Dry            | West     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2019-Oct-28, Mon,09:46 | Clear       | Sideswipe        | P.D. only        | Dry            | West     | Changing lanes      | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Going ahead         | Police vehicle            | Other motor vehicle |         |
| 2020-May-09, Sat,10:25 | Clear       | SMV other        | Non-fatal injury | Dry            | East     | Turning left        | Pick-up truck             | Pedestrian          | 1       |
| 2020-Sep-13, Sun,15:30 | Rain        | Rear end         | P.D. only        | Wet            | West     | Slowing or stopping | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Going ahead         | Pick-up truck             | Other motor vehicle |         |
| 2021-Mar-10, Wed,16:19 | Clear       | Turning movement | Non-fatal injury | Dry            | East     | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2021-Mar-17, Wed,03:02 | Clear       | Angle            | P.D. only        | Dry            | West     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Turning left        | Automobile, station wagon | Other motor vehicle |         |
| 2021-Nov-26, Fri,12:48 | Clear       | Angle            | P.D. only        | Dry            | East     | Turning left        | Truck and trailer         | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Turning left        | Automobile, station wagon | Other motor vehicle |         |
| 2022-Feb-02, Wed,20:44 | Rain        | SMV other        | P.D. only        | Slush          | West     | Going ahead         | Automobile, station wagon | Curb                | 0       |
| 2022-Feb-25, Fri,09:42 | Snow        | Rear end         | P.D. only        | Loose snow     | West     | Going ahead         | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Stopped             | Pick-up truck             | Other motor vehicle |         |
| 2022-Apr-08, Fri,22:20 | Clear       | SMV other        | Non-fatal injury | Dry            | West     | Going ahead         | Automobile, station wagon | Curb                | 0       |
|                        |             |                  |                  |                | East     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2022-Dec-22, Thu,12:00 | Clear       | Turning movement | P.D. only        | Dry            | East     | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |



# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** HAZELDEAN RD @ MANTRA ST/TILLAGE ST

**Traffic Control:** Traffic signal

**Total Collisions:** 11

| Date/Day/Time          | Environment   | Impact Type      | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|---------------|------------------|----------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2018-Feb-01, Thu,15:36 | Freezing Rain | Rear end         | P.D. only      | Wet            | West     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                |                | West     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
|                        |               |                  |                |                | West     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2018-Mar-14, Wed,23:20 | Clear         | Rear end         | P.D. only      | Ice            | East     | Slowing or stopping | Automobile, station wagon | Skidding/sliding    | 0       |
|                        |               |                  |                |                | East     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
|                        |               |                  |                |                | East     | Slowing or stopping | Automobile, station wagon | Skidding/sliding    |         |
| 2018-Mar-19, Mon,10:30 | Clear         | Turning movement | P.D. only      | Dry            | East     | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                |                | West     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2018-Oct-21, Sun,16:04 | Clear         | Rear end         | P.D. only      | Dry            | West     | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                |                | West     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2018-Nov-06, Tue,15:50 | Clear         | Rear end         | P.D. only      | Wet            | East     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                |                | East     | Stopped             | Delivery van              | Other motor vehicle |         |
|                        |               |                  |                |                | East     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
|                        |               |                  |                |                | East     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2019-Mar-29, Fri,10:20 | Clear         | Turning movement | P.D. only      | Dry            | East     | Making "U" turn     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                |                | West     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2019-Jun-04, Tue,14:44 | Clear         | SMV other        | P.D. only      | Dry            | South    | Turning right       | Automobile, station wagon | Pedestrian          | 1       |
| 2019-Sep-08, Sun,15:32 | Clear         | Rear end         | P.D. only      | Dry            | East     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                |                | East     | Slowing or stopping | Passenger van             | Other motor vehicle |         |
| 2021-Dec-16, Thu,14:10 | Clear         | Angle            | P.D. only      | Dry            | South    | Turning right       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                |                | West     | Going ahead         | Pick-up truck             | Other motor vehicle |         |
| 2022-Mar-19, Sat,11:15 | Rain          | Sideswipe        | P.D. only      | Wet            | West     | Changing lanes      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                |                | West     | Turning right       | Automobile, station wagon | Other motor vehicle |         |



# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** HAZELDEAN RD @ MANTRA ST/TILLAGE ST

**Traffic Control:** Traffic signal

**Total Collisions:** 11

| Date/Day/Time          | Environment | Impact Type      | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuver | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|------------------|----------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2022-Aug-04, Thu,16:20 | Clear       | Turning movement | P.D. only      | Dry            | East     | Turning left      | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                |                | West     | Going ahead       | Automobile, station wagon | Other motor vehicle |         |

**Location:** HAZELDEAN RD @ ROGER GRIFFITHS AVE

**Traffic Control:** Traffic signal

**Total Collisions:** 8

| Date/Day/Time          | Environment | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuver   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|------------------|------------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2018-Jul-10, Tue,11:30 | Clear       | Rear end         | P.D. only        | Dry            | East     | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | East     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2018-Sep-22, Sat,17:32 | Clear       | Turning movement | Non-fatal injury | Dry            | West     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | East     | Turning left        | Automobile, station wagon | Other motor vehicle |         |
| 2019-Nov-19, Tue,12:05 | Clear       | Turning movement | P.D. only        | Dry            | East     | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2019-Nov-19, Tue,12:22 | Clear       | Rear end         | P.D. only        | Dry            | West     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Slowing or stopping | Automobile, station wagon | Other motor vehicle |         |
| 2020-Feb-27, Thu,10:40 | Clear       | Sideswipe        | P.D. only        | Loose snow     | West     | Changing lanes      | Truck - closed            | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2020-Mar-06, Fri,14:47 | Snow        | Angle            | Non-fatal injury | Wet            | South    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2020-Nov-22, Sun,17:15 | Snow        | SMV other        | P.D. only        | Loose snow     | West     | Slowing or stopping | Pick-up truck             | Skidding/sliding    | 0       |
| 2022-Nov-02, Wed,19:04 | Clear       | SMV other        | Non-fatal injury | Dry            | East     | Turning left        | Passenger van             | Pedestrian          | 1       |

**Location:** HAZELDEAN RD @ TERRY FOX DR

**Traffic Control:** Traffic signal

**Total Collisions:** 128

| Date/Day/Time | Environment | Impact Type | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuver | Vehicle type | First Event | No. Ped |
|---------------|-------------|-------------|----------------|----------------|----------|-------------------|--------------|-------------|---------|
|---------------|-------------|-------------|----------------|----------------|----------|-------------------|--------------|-------------|---------|

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** HAZELDEAN RD @ TERRY FOX DR

**Traffic Control:** Traffic signal

**Total Collisions:** 128

| Date/Day/Time          | Environment | Impact Type | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|------------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2018-Jan-30, Tue,16:22 | Clear       | Rear end    | P.D. only        | Dry            | North    | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | North    | Turning right     | Pick-up truck             | Other motor vehicle |         |
| 2018-Feb-17, Sat,18:07 | Clear       | Rear end    | P.D. only        | Dry            | North    | Going ahead       | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |             |                  |                | North    | Stopped           | Automobile, station wagon | Other motor vehicle |         |
| 2018-Mar-08, Thu,19:13 | Snow        | Rear end    | P.D. only        | Ice            | East     | Going ahead       | Automobile, station wagon | Skidding/sliding    | 0       |
|                        |             |             |                  |                | East     | Stopped           | Automobile, station wagon | Other motor vehicle |         |
| 2018-Mar-20, Tue,12:38 | Clear       | Rear end    | Non-fatal injury | Dry            | South    | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | South    | Turning right     | Automobile, station wagon | Other motor vehicle |         |
| 2018-Apr-19, Thu,11:45 | Clear       | Rear end    | P.D. only        | Dry            | South    | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | South    | Turning right     | Automobile, station wagon | Other motor vehicle |         |
| 2018-Apr-26, Thu,11:00 | Clear       | Sideswipe   | P.D. only        | Dry            | North    | Unknown           | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | North    | Unknown           | Automobile, station wagon | Other motor vehicle |         |
| 2018-Apr-27, Fri,17:20 | Clear       | Sideswipe   | P.D. only        | Dry            | West     | Changing lanes    | Passenger van             | Other motor vehicle | 0       |
|                        |             |             |                  |                | West     | Going ahead       | Automobile, station wagon | Other motor vehicle |         |
| 2018-Apr-30, Mon,09:27 | Clear       | Rear end    | Non-fatal injury | Dry            | East     | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | East     | Turning right     | Automobile, station wagon | Other motor vehicle |         |
| 2018-May-17, Thu,11:33 | Clear       | Rear end    | Non-fatal injury | Dry            | West     | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | West     | Stopped           | Automobile, station wagon | Other motor vehicle |         |
| 2018-May-17, Thu,20:06 | Clear       | Rear end    | P.D. only        | Dry            | South    | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | South    | Turning right     | Automobile, station wagon | Other motor vehicle |         |
| 2018-May-30, Wed,06:45 | Clear       | Sideswipe   | P.D. only        | Wet            | East     | Changing lanes    | Passenger van             | Other motor vehicle | 0       |
|                        |             |             |                  |                | East     | Going ahead       | Automobile, station wagon | Other motor vehicle |         |
| 2018-Jun-12, Tue,19:02 | Clear       | Angle       | Non-fatal injury | Dry            | South    | Going ahead       | Bicycle                   | Other motor vehicle | 0       |
|                        |             |             |                  |                | West     | Turning right     | Automobile, station wagon | Cyclist             |         |

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** HAZELDEAN RD @ TERRY FOX DR

**Traffic Control:** Traffic signal

**Total Collisions:** 128

| Date/Day/Time          | Environment   | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre | Vehicle type              | First Event         | No. Ped |
|------------------------|---------------|------------------|------------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2018-Jul-07, Sat,09:55 | Clear         | Rear end         | Non-fatal injury | Dry            | South    | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | South    | Turning right     | Automobile, station wagon | Other motor vehicle |         |
| 2018-Aug-02, Thu,17:33 | Clear         | Rear end         | P.D. only        | Dry            | North    | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | North    | Stopped           | Automobile, station wagon | Other motor vehicle |         |
| 2018-Aug-10, Fri,12:29 | Clear         | Rear end         | P.D. only        | Dry            | South    | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | South    | Stopped           | Automobile, station wagon | Other motor vehicle |         |
| 2018-Aug-26, Sun,21:48 | Clear         | Turning movement | Non-fatal injury | Dry            | South    | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | South    | Turning right     | Automobile, station wagon | Other motor vehicle |         |
| 2018-Oct-09, Tue,13:50 | Clear         | Turning movement | P.D. only        | Dry            | South    | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | North    | Turning left      | Automobile, station wagon | Other motor vehicle |         |
| 2018-Oct-22, Mon,11:45 | Clear         | Rear end         | P.D. only        | Dry            | South    | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | South    | Turning right     | Automobile, station wagon | Other motor vehicle |         |
| 2018-Oct-23, Tue,14:00 | Clear         | Rear end         | P.D. only        | Dry            | East     | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | East     | Stopped           | Automobile, station wagon | Other motor vehicle |         |
| 2018-Nov-07, Wed,15:55 | Clear         | Rear end         | P.D. only        | Dry            | East     | Turning right     | Pick-up truck             | Other motor vehicle | 0       |
|                        |               |                  |                  |                | East     | Turning right     | Automobile, station wagon | Other motor vehicle |         |
| 2018-Nov-15, Thu,20:04 | Clear         | Sideswipe        | Non-fatal injury | Dry            | North    | Changing lanes    | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | North    | Going ahead       | Automobile, station wagon | Other motor vehicle |         |
| 2018-Nov-26, Mon,13:00 | Rain          | Angle            | P.D. only        | Wet            | East     | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | South    | Going ahead       | Automobile, station wagon | Other motor vehicle |         |
| 2018-Dec-05, Wed,18:30 | Clear         | Rear end         | P.D. only        | Wet            | West     | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | West     | Turning right     | Automobile, station wagon | Other motor vehicle |         |
| 2018-Dec-14, Fri,15:45 | Freezing Rain | Rear end         | P.D. only        | Ice            | East     | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | East     | Turning right     | Automobile, station wagon | Other motor vehicle |         |

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** HAZELDEAN RD @ TERRY FOX DR

**Traffic Control:** Traffic signal

**Total Collisions:** 128

| Date/Day/Time          | Environment | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|------------------|------------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2018-Dec-17, Mon,17:28 | Snow        | Rear end         | P.D. only        | Ice            | East     | Turning left        | Truck - closed            | Other motor vehicle | 0       |
|                        |             |                  |                  |                | East     | Turning left        | Automobile, station wagon | Other motor vehicle |         |
| 2018-Dec-18, Tue,11:45 | Clear       | Sideswipe        | P.D. only        | Dry            | East     | Changing lanes      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | East     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2018-Dec-26, Wed,16:00 | Clear       | Sideswipe        | P.D. only        | Wet            | South    | Turning left        | Snow plow                 | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2019-Jan-13, Sun,23:44 | Clear       | Turning movement | P.D. only        | Dry            | West     | Making "U" turn     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Turning left        | Automobile, station wagon | Other motor vehicle |         |
| 2019-Jan-19, Sat,09:43 | Snow        | Rear end         | P.D. only        | Loose snow     | North    | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2019-Feb-07, Thu,16:09 | Clear       | Rear end         | P.D. only        | Packed snow    | South    | Turning right       | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Turning right       | Automobile, station wagon | Other motor vehicle |         |
| 2019-Feb-27, Wed,09:22 | Clear       | Angle            | P.D. only        | Dry            | South    | Turning right       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Going ahead         | Truck - dump              | Other motor vehicle |         |
| 2019-Apr-10, Wed,16:50 | Clear       | Rear end         | P.D. only        | Dry            | South    | Turning right       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Turning right       | Automobile, station wagon | Other motor vehicle |         |
| 2019-Apr-14, Sun,08:45 | Clear       | Rear end         | P.D. only        | Dry            | North    | Turning right       | Unknown                   | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Turning right       | Automobile, station wagon | Other motor vehicle |         |
| 2019-Apr-16, Tue,15:30 | Clear       | Rear end         | Non-fatal injury | Dry            | South    | Turning right       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Turning right       | Passenger van             | Other motor vehicle |         |
| 2019-Apr-30, Tue,15:30 | Clear       | Rear end         | Non-fatal injury | Dry            | North    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Stopped             | Passenger van             | Other motor vehicle |         |

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** HAZELDEAN RD @ TERRY FOX DR

**Traffic Control:** Traffic signal

**Total Collisions:** 128

| Date/Day/Time          | Environment | Impact Type | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|------------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2019-May-24, Fri,15:11 | Clear       | Sideswipe   | P.D. only        | Dry            | North    | Changing lanes    | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | North    | Turning left      | Pick-up truck             | Other motor vehicle |         |
| 2019-May-26, Sun,16:21 | Clear       | Rear end    | Non-fatal injury | Dry            | East     | Turning right     | Passenger van             | Other motor vehicle | 0       |
|                        |             |             |                  |                | East     | Turning right     | Motorcycle                | Other motor vehicle |         |
| 2019-May-29, Wed,11:44 | Clear       | Angle       | P.D. only        | Dry            | West     | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | South    | Turning left      | Automobile, station wagon | Other motor vehicle |         |
| 2019-Jun-02, Sun,14:15 | Clear       | Rear end    | P.D. only        | Dry            | North    | Turning right     | Unknown                   | Other motor vehicle | 0       |
|                        |             |             |                  |                | North    | Turning right     | Automobile, station wagon | Other motor vehicle |         |
| 2019-Jul-11, Thu,09:40 | Clear       | Rear end    | P.D. only        | Dry            | West     | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | West     | Stopped           | Automobile, station wagon | Other motor vehicle |         |
| 2019-Jul-16, Tue,15:00 | Clear       | Other       | P.D. only        | Dry            | West     | Reversing         | Unknown                   | Other motor vehicle | 0       |
|                        |             |             |                  |                | East     | Stopped           | Pick-up truck             | Other motor vehicle |         |
| 2019-Jul-21, Sun,10:20 | Clear       | Rear end    | P.D. only        | Dry            | South    | Going ahead       | Tow truck                 | Other motor vehicle | 0       |
|                        |             |             |                  |                | South    | Stopped           | Automobile, station wagon | Other motor vehicle |         |
| 2019-Aug-08, Thu,13:00 | Clear       | Rear end    | P.D. only        | Dry            | East     | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | East     | Stopped           | Automobile, station wagon | Other motor vehicle |         |
| 2019-Aug-14, Wed,17:48 | Clear       | SMV other   | Non-fatal injury | Dry            | South    | Turning right     | Automobile, station wagon | Pedestrian          | 1       |
| 2019-Aug-15, Thu,21:19 | Rain        | Rear end    | Non-fatal injury | Wet            | South    | Going ahead       | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |             |                  |                | South    | Stopped           | Automobile, station wagon | Other motor vehicle |         |
| 2019-Sep-23, Mon,15:05 | Clear       | Rear end    | P.D. only        | Dry            | South    | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | South    | Turning right     | Automobile, station wagon | Other motor vehicle |         |
| 2019-Nov-07, Thu,10:45 | Clear       | Rear end    | P.D. only        | Dry            | North    | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | North    | Turning right     | Pick-up truck             | Other motor vehicle |         |

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** HAZELDEAN RD @ TERRY FOX DR

**Traffic Control:** Traffic signal

**Total Collisions:** 128

| Date/Day/Time          | Environment | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|------------------|------------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2019-Nov-16, Sat,19:25 | Clear       | Rear end         | Non-fatal injury | Dry            | East     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | East     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2019-Nov-18, Mon,12:30 | Clear       | Rear end         | P.D. only        | Dry            | West     | Slowing or stopping | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2019-Dec-04, Wed,14:35 | Clear       | Rear end         | P.D. only        | Dry            | East     | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | East     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2019-Dec-13, Fri,08:10 | Clear       | Rear end         | P.D. only        | Dry            | North    | Turning right       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Stopped             | Pick-up truck             | Other motor vehicle |         |
| 2019-Dec-15, Sun,11:35 | Clear       | Rear end         | P.D. only        | Slush          | North    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Slowing or stopping | Automobile, station wagon | Other motor vehicle |         |
| 2019-Dec-19, Thu,09:56 | Clear       | Turning movement | P.D. only        | Dry            | South    | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2020-Jan-01, Wed,19:23 | Clear       | Angle            | Non-fatal injury | Wet            | North    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Turning left        | Automobile, station wagon | Other motor vehicle |         |
|                        |             |                  |                  |                | East     | Turning left        | Automobile, station wagon | Other motor vehicle |         |
| 2020-Jan-23, Thu,20:03 | Clear       | Rear end         | P.D. only        | Dry            | South    | Going ahead         | Unknown                   | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2020-Feb-10, Mon,16:05 | Clear       | Rear end         | P.D. only        | Dry            | South    | Turning right       | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Turning right       | Automobile, station wagon | Other motor vehicle |         |
| 2020-Feb-15, Sat,22:03 | Clear       | Rear end         | P.D. only        | Dry            | East     | Turning right       | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | East     | Turning right       | Automobile, station wagon | Other motor vehicle |         |
| 2020-Feb-20, Thu,16:35 | Clear       | Angle            | P.D. only        | Dry            | South    | Turning right       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** HAZELDEAN RD @ TERRY FOX DR

**Traffic Control:** Traffic signal

**Total Collisions:** 128

| Date/Day/Time          | Environment | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event           | No. Ped |
|------------------------|-------------|------------------|------------------|----------------|----------|---------------------|---------------------------|-----------------------|---------|
| 2020-Mar-06, Fri,11:57 | Clear       | Rear end         | Non-fatal injury | Dry            | South    | Going ahead         | Truck - dump              | Other motor vehicle   | 0       |
|                        |             |                  |                  |                | South    | Going ahead         | Automobile, station wagon | Other motor vehicle   |         |
| 2020-Mar-07, Sat,16:05 | Clear       | Rear end         | Non-fatal injury | Dry            | South    | Turning right       | Passenger van             | Other motor vehicle   | 0       |
|                        |             |                  |                  |                | South    | Turning right       | Automobile, station wagon | Other motor vehicle   |         |
| 2020-Apr-04, Sat,17:50 | Clear       | Rear end         | P.D. only        | Dry            | South    | Turning right       | Automobile, station wagon | Other motor vehicle   | 0       |
|                        |             |                  |                  |                | South    | Turning right       | Automobile, station wagon | Other motor vehicle   |         |
| 2020-Apr-26, Sun,16:16 | Clear       | Other            | P.D. only        | Dry            | South    | Reversing           | Pick-up truck             | Other motor vehicle   | 0       |
|                        |             |                  |                  |                | North    | Stopped             | Pick-up truck             | Other motor vehicle   |         |
| 2020-Jun-10, Wed,13:23 | Clear       | Rear end         | P.D. only        | Dry            | North    | Slowing or stopping | Pick-up truck             | Other motor vehicle   | 0       |
|                        |             |                  |                  |                | North    | Stopped             | Pick-up truck             | Other motor vehicle   |         |
| 2020-Jun-16, Tue,12:15 | Clear       | Turning movement | P.D. only        | Dry            | South    | Turning left        | Truck - dump              | Other motor vehicle   | 0       |
|                        |             |                  |                  |                | North    | Turning right       | Automobile, station wagon | Other motor vehicle   |         |
| 2020-Jun-26, Fri,15:45 | Clear       | Rear end         | P.D. only        | Dry            | North    | Going ahead         | Automobile, station wagon | Other motor vehicle   | 0       |
|                        |             |                  |                  |                | North    | Stopped             | Automobile, station wagon | Other motor vehicle   |         |
| 2020-Jul-23, Thu,14:15 | Clear       | Rear end         | P.D. only        | Dry            | South    | Turning right       | Pick-up truck             | Other motor vehicle   | 0       |
|                        |             |                  |                  |                | South    | Turning right       | Pick-up truck             | Other motor vehicle   |         |
| 2020-Aug-14, Fri,13:30 | Clear       | Turning movement | P.D. only        | Dry            | East     | Turning right       | Automobile, station wagon | Other motor vehicle   | 0       |
|                        |             |                  |                  |                | West     | Turning left        | Pick-up truck             | Other motor vehicle   |         |
| 2020-Sep-01, Tue,14:15 | Clear       | Turning movement | P.D. only        | Dry            | North    | Turning right       | Automobile, station wagon | Other motor vehicle   | 0       |
|                        |             |                  |                  |                | South    | Turning left        | Automobile, station wagon | Other motor vehicle   |         |
| 2020-Sep-05, Sat,13:24 | Clear       | Angle            | Non-fatal injury | Dry            | East     | Going ahead         | Automobile, station wagon | Other motor vehicle   | 0       |
|                        |             |                  |                  |                | South    | Turning left        | Automobile, station wagon | Other motor vehicle   |         |
|                        |             |                  |                  |                | West     | Turning left        | Pick-up truck             | Pole (utility, power) |         |





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**Location:** HAZELDEAN RD @ TERRY FOX DR

**Traffic Control:** Traffic signal

**Total Collisions:** 128

| Date/Day/Time          | Environment | Impact Type | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|----------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2020-Oct-17, Sat,14:22 | Clear       | Angle       | P.D. only      | Dry            | East     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | North    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2020-Oct-29, Thu,18:15 | Clear       | Rear end    | P.D. only      | Dry            | West     | Turning right       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | West     | Turning right       | Automobile, station wagon | Other motor vehicle |         |
| 2020-Nov-25, Wed,10:00 | Snow        | Rear end    | P.D. only      | Loose snow     | West     | Going ahead         | Passenger van             | Other motor vehicle | 0       |
|                        |             |             |                |                | West     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2020-Dec-04, Fri,10:50 | Clear       | Rear end    | P.D. only      | Wet            | West     | Slowing or stopping | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |             |                |                | West     | Slowing or stopping | Automobile, station wagon | Other motor vehicle |         |
| 2020-Dec-24, Thu,12:03 | Clear       | Rear end    | P.D. only      | Loose snow     | East     | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | East     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2021-Jan-21, Thu,08:25 | Snow        | Rear end    | P.D. only      | Loose snow     | North    | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | North    | Stopped             | Pick-up truck             | Other motor vehicle |         |
| 2021-Feb-24, Wed,13:20 | Snow        | Rear end    | P.D. only      | Wet            | West     | Turning right       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | West     | Turning right       | Unknown                   | Other motor vehicle |         |
| 2021-Feb-25, Thu,08:20 | Snow        | Rear end    | P.D. only      | Packed snow    | North    | Going ahead         | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |             |                |                | North    | Stopped             | Passenger van             | Other motor vehicle |         |
| 2021-Mar-24, Wed,13:38 | Rain        | Rear end    | P.D. only      | Wet            | West     | Unknown             | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | West     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2021-Mar-25, Thu,10:00 | Clear       | Sideswipe   | P.D. only      | Dry            | South    | Changing lanes      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | South    | Going ahead         | Pick-up truck             | Other motor vehicle |         |
| 2021-Apr-18, Sun,19:24 | Clear       | Rear end    | P.D. only      | Dry            | West     | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | West     | Stopped             | Automobile, station wagon | Other motor vehicle |         |

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**From:** January 1, 2018 **To:** December 31, 2022

**Location:** HAZELDEAN RD @ TERRY FOX DR

**Traffic Control:** Traffic signal

**Total Collisions:** 128

| Date/Day/Time          | Environment | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|------------------|------------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2021-May-25, Tue,14:51 | Clear       | Turning movement | P.D. only        | Dry            | South    | Turning left      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Turning right     | Pick-up truck             | Other motor vehicle |         |
| 2021-May-31, Mon,14:36 | Clear       | Rear end         | P.D. only        | Dry            | West     | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Stopped           | Truck and trailer         | Other motor vehicle |         |
| 2021-Jul-04, Sun,11:30 | Clear       | Turning movement | Non-fatal injury | Dry            | South    | Turning left      | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Going ahead       | Pick-up truck             | Other motor vehicle |         |
| 2021-Jul-15, Thu,12:28 | Clear       | Rear end         | P.D. only        | Dry            | North    | Going ahead       | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Going ahead       | Pick-up truck             | Other motor vehicle |         |
| 2021-Aug-23, Mon,06:31 | Clear       | Angle            | P.D. only        | Dry            | North    | Going ahead       | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | East     | Going ahead       | Automobile, station wagon | Other motor vehicle |         |
|                        |             |                  |                  |                | East     | Going ahead       | Pick-up truck             | Other motor vehicle |         |
| 2021-Sep-14, Tue,14:41 | Clear       | Rear end         | P.D. only        | Dry            | East     | Turning left      | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | East     | Turning left      | Pick-up truck             | Other motor vehicle |         |
|                        |             |                  |                  |                | East     | Turning left      | Passenger van             | Other motor vehicle |         |
| 2021-Sep-29, Wed,07:30 | Clear       | Rear end         | P.D. only        | Dry            | North    | Turning right     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Turning right     | Automobile, station wagon | Other motor vehicle |         |
| 2021-Sep-30, Thu,20:05 | Clear       | Sideswipe        | P.D. only        | Dry            | West     | Turning left      | Unknown                   | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Turning left      | Pick-up truck             | Other motor vehicle |         |
| 2021-Oct-03, Sun,12:46 | Rain        | Rear end         | P.D. only        | Wet            | South    | Turning right     | Automobile, station wagon | Skidding/sliding    | 0       |
|                        |             |                  |                  |                | South    | Turning right     | Pick-up truck             | Other motor vehicle |         |
| 2021-Oct-19, Tue,17:46 | Clear       | Rear end         | Non-fatal injury | Dry            | East     | Changing lanes    | Bicycle                   | Other motor vehicle | 0       |
|                        |             |                  |                  |                | East     | Going ahead       | Automobile, station wagon | Cyclist             |         |
| 2021-Nov-03, Wed,14:30 | Clear       | Rear end         | P.D. only        | Dry            | East     | Turning left      | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | East     | Turning left      | Automobile, station wagon | Other motor vehicle |         |

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**Traffic Control:** Traffic signal

**Total Collisions:** 128

| Date/Day/Time          | Environment | Impact Type | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|------------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2021-Nov-04, Thu,23:06 | Clear       | Angle       | P.D. only        | Dry            | South    | Going ahead         | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |             |                  |                | East     | Turning left        | Fire vehicle              | Other motor vehicle |         |
| 2021-Nov-23, Tue,15:42 | Clear       | Rear end    | P.D. only        | Dry            | South    | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | South    | Stopped             | Pick-up truck             | Other motor vehicle |         |
| 2021-Nov-23, Tue,18:45 | Clear       | Other       | P.D. only        | Dry            | North    | Reversing           | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2021-Dec-04, Sat,12:15 | Clear       | Sideswipe   | P.D. only        | Dry            | South    | Changing lanes      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | South    | Going ahead         | Pick-up truck             | Other motor vehicle |         |
| 2021-Dec-11, Sat,14:12 | Clear       | Other       | P.D. only        | Dry            | East     | Reversing           | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |             |                  |                | West     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2021-Dec-22, Wed,09:55 | Snow        | Sideswipe   | P.D. only        | Slush          | North    | Changing lanes      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | North    | Going ahead         | Pick-up truck             | Other motor vehicle |         |
| 2022-Jan-06, Thu,12:00 | Clear       | Rear end    | P.D. only        | Slush          | South    | Turning right       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | South    | Turning right       | Pick-up truck             | Other motor vehicle |         |
| 2022-Jan-27, Thu,18:00 | Clear       | Rear end    | P.D. only        | Wet            | West     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | West     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2022-Feb-05, Sat,15:10 | Clear       | Rear end    | Non-fatal injury | Dry            | South    | Turning right       | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |             |                  |                | South    | Turning right       | Pick-up truck             | Other motor vehicle |         |
| 2022-Feb-12, Sat,10:50 | Snow        | Rear end    | P.D. only        | Ice            | East     | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | East     | Stopped             | Pick-up truck             | Other motor vehicle |         |
| 2022-Feb-18, Fri,21:48 | Snow        | Rear end    | P.D. only        | Packed snow    | West     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | West     | Slowing or stopping | Automobile, station wagon | Other motor vehicle |         |
|                        |             |             |                  |                | West     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |

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**Location:** HAZELDEAN RD @ TERRY FOX DR

**Traffic Control:** Traffic signal

**Total Collisions:** 128

| Date/Day/Time          | Environment | Impact Type      | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event           | No. Ped |
|------------------------|-------------|------------------|----------------|----------------|----------|---------------------|---------------------------|-----------------------|---------|
| 2022-Mar-06, Sun,06:34 | Clear       | SMV other        | P.D. only      | Dry            | South    | Unknown             | Automobile, station wagon | Pole (utility, power) | 0       |
| 2022-Mar-31, Thu,18:15 | Clear       | Rear end         | P.D. only      | Dry            | East     | Unknown             | Unknown                   | Other motor vehicle   | 0       |
|                        |             |                  |                |                | East     | Stopped             | Automobile, station wagon | Other motor vehicle   |         |
| 2022-Apr-08, Fri,17:35 | Clear       | Turning movement | P.D. only      | Dry            | North    | Changing lanes      | Pick-up truck             | Other motor vehicle   | 0       |
|                        |             |                  |                |                | South    | Turning left        | Automobile, station wagon | Other motor vehicle   |         |
| 2022-Apr-15, Fri,16:00 | Clear       | Rear end         | P.D. only      | Dry            | South    | Slowing or stopping | Automobile, station wagon | Other motor vehicle   | 0       |
|                        |             |                  |                |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle   |         |
| 2022-Apr-22, Fri,13:00 | Clear       | Rear end         | P.D. only      | Dry            | South    | Turning right       | Automobile, station wagon | Other motor vehicle   | 0       |
|                        |             |                  |                |                | South    | Turning right       | Automobile, station wagon | Other motor vehicle   |         |
| 2022-Apr-23, Sat,13:05 | Clear       | Rear end         | P.D. only      | Dry            | North    | Going ahead         | Automobile, station wagon | Other motor vehicle   | 0       |
|                        |             |                  |                |                | North    | Stopped             | Automobile, station wagon | Other motor vehicle   |         |
| 2022-Apr-27, Wed,11:05 | Snow        | Rear end         | P.D. only      | Wet            | North    | Slowing or stopping | Pick-up truck             | Other motor vehicle   | 0       |
|                        |             |                  |                |                | North    | Stopped             | Automobile, station wagon | Other motor vehicle   |         |
| 2022-May-01, Sun,16:05 | Clear       | Sideswipe        | P.D. only      | Dry            | East     | Changing lanes      | Pick-up truck             | Other motor vehicle   | 0       |
|                        |             |                  |                |                | East     | Going ahead         | Pick-up truck             | Other motor vehicle   |         |
| 2022-May-10, Tue,17:55 | Clear       | Rear end         | P.D. only      | Dry            | North    | Slowing or stopping | Automobile, station wagon | Other motor vehicle   | 0       |
|                        |             |                  |                |                | North    | Stopped             | Automobile, station wagon | Other motor vehicle   |         |
| 2022-Jun-27, Mon,09:13 | Clear       | Rear end         | P.D. only      | Dry            | South    | Turning right       | Automobile, station wagon | Other motor vehicle   | 0       |
|                        |             |                  |                |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle   |         |
| 2022-Aug-06, Sat,17:00 | Clear       | Turning movement | P.D. only      | Dry            | South    | Merging             | Automobile, station wagon | Other motor vehicle   | 0       |
|                        |             |                  |                |                | South    | Turning left        | Automobile, station wagon | Other motor vehicle   |         |
| 2022-Sep-10, Sat,20:20 | Clear       | Angle            | P.D. only      | Dry            | North    | Turning right       | Automobile, station wagon | Other motor vehicle   | 0       |
|                        |             |                  |                |                | East     | Going ahead         | Automobile, station wagon | Other motor vehicle   |         |



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**Traffic Control:** Traffic signal

**Total Collisions:** 128

| Date/Day/Time          | Environment | Impact Type      | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|------------------|----------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2022-Sep-14, Wed,19:40 | Clear       | Rear end         | P.D. only      | Dry            | East     | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                |                | East     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2022-Oct-28, Fri,16:00 | Rain        | Rear end         | P.D. only      | Wet            | North    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                |                | North    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2022-Nov-02, Wed,12:50 | Clear       | Rear end         | P.D. only      | Dry            | South    | Stopped             | Passenger van             | Other motor vehicle | 0       |
|                        |             |                  |                |                | South    | Going ahead         | Pick-up truck             | Other motor vehicle |         |
| 2022-Nov-03, Thu,19:00 | Clear       | Rear end         | P.D. only      | Dry            | North    | Stopped             | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                |                | North    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2022-Nov-05, Sat,18:30 | Clear       | Rear end         | P.D. only      | Dry            | East     | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                |                | East     | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2022-Nov-07, Mon,06:50 | Clear       | Rear end         | P.D. only      | Dry            | North    | Stopped             | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                |                | North    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2022-Nov-09, Wed,08:30 | Clear       | Rear end         | P.D. only      | Dry            | North    | Going ahead         | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                |                | North    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2022-Nov-09, Wed,11:10 | Clear       | Rear end         | P.D. only      | Dry            | West     | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                |                | West     | Going ahead         | Unknown                   | Other motor vehicle |         |
| 2022-Nov-09, Wed,12:00 | Clear       | Rear end         | P.D. only      | Dry            | North    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                |                | North    | Slowing or stopping | Automobile, station wagon | Other motor vehicle |         |
| 2022-Nov-12, Sat,09:20 | Clear       | Sideswipe        | P.D. only      | Dry            | West     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                |                | West     | Changing lanes      | Automobile, station wagon | Other motor vehicle |         |
| 2022-Nov-17, Thu,09:15 | Snow        | Turning movement | P.D. only      | Wet            | South    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                |                | South    | Turning right       | Automobile, station wagon | Other motor vehicle |         |
| 2022-Nov-28, Mon,10:45 | Clear       | Turning movement | P.D. only      | Dry            | South    | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                |                | South    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |



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**Location:** HAZELDEAN RD @ TERRY FOX DR

**Traffic Control:** Traffic signal

**Total Collisions:** 128

| Date/Day/Time          | Environment   | Impact Type | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|---------------|-------------|----------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2022-Dec-14, Wed,12:30 | Clear         | Rear end    | P.D. only      | Dry            | South    | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |             |                |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2022-Dec-30, Fri,18:25 | Drifting Snow | Rear end    | P.D. only      | Loose snow     | South    | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |             |                |                | South    | Stopped             | Automobile, station wagon | Other               |         |

**Location:** HAZELDEAN RD btwn 325 E OF HUNTMAR DR/IBER RD & ROGER GRIFFITHS AVE

**Traffic Control:** No control

**Total Collisions:** 1

| Date/Day/Time          | Environment | Impact Type | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|----------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2021-Apr-26, Mon,11:56 | Clear       | Rear end    | P.D. only      | Dry            | East     | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | East     | Stopped           | Pick-up truck             | Other motor vehicle |         |

**Location:** HAZELDEAN RD btwn 635 E OF HUNTMAR DR/IBER RD & 780 W OF TERRY FOX DR

**Traffic Control:** No control

**Total Collisions:** 1

| Date/Day/Time          | Environment | Impact Type | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|----------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2020-Mar-24, Tue,17:10 | Clear       | Sideswipe   | P.D. only      | Dry            | East     | Changing lanes    | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | East     | Going ahead       | Automobile, station wagon | Other motor vehicle |         |

**Location:** HAZELDEAN RD btwn 780 W OF TERRY FOX DR & KINCARDINE DR

**Traffic Control:** No control

**Total Collisions:** 4

| Date/Day/Time          | Environment | Impact Type | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|------------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2018-Jun-29, Fri,12:43 | Clear       | Rear end    | Non-fatal injury | Dry            | East     | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | East     | Slowing or stopping | Automobile, station wagon | Other motor vehicle |         |
| 2019-Mar-23, Sat,18:12 | Clear       | Rear end    | P.D. only        | Dry            | East     | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | East     | Stopped             | Pick-up truck             | Other motor vehicle |         |
| 2019-Jul-26, Fri,14:30 | Clear       | Sideswipe   | P.D. only        | Dry            | West     | Changing lanes      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | West     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |

# Transportation Services - Traffic Services

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**From:** January 1, 2018 **To:** December 31, 2022

**Location:** HAZELDEAN RD btwn 780 W OF TERRY FOX DR & KINCARDINE DR

**Traffic Control:** No control

**Total Collisions:** 4

| Date/Day/Time          | Environment | Impact Type | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuver | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|------------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2019-Jul-31, Wed,18:26 | Clear       | Angle       | Non-fatal injury | Dry            | North    | Turning right     | Automobile, station wagon | Cyclist             | 0       |
|                        |             |             |                  |                | West     | Going ahead       | Bicycle                   | Other motor vehicle |         |

**Location:** HAZELDEAN RD btwn KINCARDINE DR & TERRY FOX DR

**Traffic Control:** No control

**Total Collisions:** 7

| Date/Day/Time          | Environment | Impact Type | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuver   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|------------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2018-Feb-18, Sun,13:30 | Clear       | Angle       | P.D. only        | Dry            | North    | Turning right       | Passenger van             | Other motor vehicle | 0       |
|                        |             |             |                  |                | East     | Going ahead         | Pick-up truck             | Other motor vehicle |         |
| 2018-Dec-04, Tue,12:18 | Clear       | Angle       | Non-fatal injury | Dry            | North    | Turning left        | Passenger van             | Other motor vehicle | 0       |
|                        |             |             |                  |                | West     | Going ahead         | Pick-up truck             | Other motor vehicle |         |
| 2019-May-28, Tue,19:28 | Clear       | Rear end    | P.D. only        | Dry            | West     | Going ahead         | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |             |                  |                | West     | Slowing or stopping | Automobile, station wagon | Other motor vehicle |         |
| 2020-Jun-03, Wed,17:00 | Rain        | Rear end    | P.D. only        | Wet            | East     | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | East     | Stopped             | Pick-up truck             | Other motor vehicle |         |
| 2020-Jun-11, Thu,12:00 | Clear       | Angle       | P.D. only        | Dry            | North    | Turning right       | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |             |                  |                | East     | Going ahead         | Pick-up truck             | Other motor vehicle |         |
| 2022-Feb-12, Sat,09:02 | Snow        | Angle       | Non-fatal injury | Loose snow     | North    | Turning right       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | East     | Going ahead         | Pick-up truck             | Other motor vehicle |         |
| 2022-Dec-22, Thu,18:00 | Snow        | Sideswipe   | P.D. only        | Wet            | West     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | West     | Going ahead         | Automobile, station wagon | Other motor vehicle |         |

**Location:** HAZELDEAN RD btwn TERRY FOX DR & EDGEWATER ST

**Traffic Control:** No control

**Total Collisions:** 3

| Date/Day/Time | Environment | Impact Type | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuver | Vehicle type | First Event | No. Ped |
|---------------|-------------|-------------|----------------|----------------|----------|-------------------|--------------|-------------|---------|
|---------------|-------------|-------------|----------------|----------------|----------|-------------------|--------------|-------------|---------|

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** HAZELDEAN RD btwn TERRY FOX DR & EDGEWATER ST

**Traffic Control:** No control

**Total Collisions:** 3

| Date/Day/Time          | Environment | Impact Type | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|----------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2018-Nov-14, Wed,12:30 | Clear       | Sideswipe   | P.D. only      | Dry            | West     | Changing lanes    | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | West     | Going ahead       | Automobile, station wagon | Other motor vehicle |         |
| 2018-Nov-28, Wed,13:37 | Clear       | Rear end    | P.D. only      | Dry            | West     | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | West     | Stopped           | Automobile, station wagon | Other motor vehicle |         |
| 2019-Jan-26, Sat,12:30 | Clear       | Rear end    | P.D. only      | Dry            | West     | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | West     | Going ahead       | Automobile, station wagon | Other motor vehicle |         |

**Location:** TERRY FOX DR @ 135 S OF HAZELDEAN RD/SOBEY'S SC

**Traffic Control:** Traffic signal

**Total Collisions:** 11

| Date/Day/Time          | Environment | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|------------------|------------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2018-Aug-31, Fri,15:35 | Clear       | SMV other        | Non-fatal injury | Dry            | West     | Turning right     | Automobile, station wagon | Pedestrian          | 1       |
| 2018-Nov-01, Thu,21:05 | Rain        | SMV other        | Non-fatal injury | Wet            | West     | Turning left      | Automobile, station wagon | Pedestrian          | 1       |
| 2019-Sep-05, Thu,07:50 | Clear       | Angle            | P.D. only        | Dry            | North    | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Turning left      | Automobile, station wagon | Other motor vehicle |         |
| 2019-Oct-18, Fri,06:58 | Clear       | Angle            | P.D. only        | Dry            | West     | Turning left      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Going ahead       | Automobile, station wagon | Other motor vehicle |         |
| 2020-Feb-15, Sat,11:05 | Clear       | Angle            | Non-fatal injury | Dry            | North    | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | East     | Going ahead       | Automobile, station wagon | Other motor vehicle |         |
| 2020-Feb-25, Tue,16:17 | Clear       | Angle            | P.D. only        | Dry            | North    | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Turning left      | Automobile, station wagon | Other motor vehicle |         |
| 2020-Feb-29, Sat,16:56 | Clear       | Sideswipe        | P.D. only        | Dry            | South    | Changing lanes    | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Turning left      | Automobile, station wagon | Other motor vehicle |         |
| 2020-Aug-14, Fri,16:00 | Clear       | Turning movement | P.D. only        | Dry            | North    | Turning left      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Going ahead       | Automobile, station wagon | Other motor vehicle |         |



# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** TERRY FOX DR @ 135 S OF HAZELDEAN RD/SOBEY'S SC

**Traffic Control:** Traffic signal

**Total Collisions:** 11

| Date/Day/Time          | Environment | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|------------------|------------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2020-Sep-11, Fri,14:42 | Clear       | Angle            | Non-fatal injury | Dry            | North    | Going ahead       | Bicycle                   | Other motor vehicle | 0       |
|                        |             |                  |                  |                | East     | Turning left      | Automobile, station wagon | Cyclist             |         |
| 2022-Jan-01, Sat,16:01 | Clear       | Rear end         | Non-fatal injury | Dry            | South    | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Stopped           | Automobile, station wagon | Other motor vehicle |         |
| 2022-May-15, Sun,20:00 | Rain        | Turning movement | P.D. only        | Wet            | South    | Turning left      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Turning right     | Automobile, station wagon | Other motor vehicle |         |

**Location:** TERRY FOX DR @ 240 S OF EDGEWATER ST

**Traffic Control:** Traffic signal

**Total Collisions:** 3

| Date/Day/Time          | Environment | Impact Type      | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|------------------|----------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2021-Feb-17, Wed,15:37 | Clear       | Rear end         | P.D. only      | Dry            | South    | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
|                        |             |                  |                |                | South    | Stopped             | Pick-up truck             | Other motor vehicle |         |
| 2021-Aug-01, Sun,15:10 | Clear       | Sideswipe        | P.D. only      | Dry            | North    | Changing lanes      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                |                | North    | Going ahead         | Pick-up truck             | Other motor vehicle |         |
| 2022-Jun-16, Thu,11:20 | Clear       | Turning movement | P.D. only      | Dry            | North    | Turning right       | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                |                | North    | Turning left        | Automobile, station wagon | Other motor vehicle |         |

**Location:** TERRY FOX DR @ EDGEWATER ST/CHARLIE ROGERS PL

**Traffic Control:** Traffic signal

**Total Collisions:** 40

| Date/Day/Time          | Environment | Impact Type | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|----------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2018-Mar-29, Thu,21:30 | Rain        | Sideswipe   | P.D. only      | Wet            | South    | Changing lanes    | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | South    | Going ahead       | Automobile, station wagon | Other motor vehicle |         |
| 2018-Apr-12, Thu,14:48 | Rain        | Angle       | P.D. only      | Wet            | South    | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | West     | Turning left      | Automobile, station wagon | Other motor vehicle |         |

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** TERRY FOX DR @ EDGEWATER ST/CHARLIE ROGERS PL

**Traffic Control:** Traffic signal

**Total Collisions:** 40

| Date/Day/Time          | Environment   | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|---------------|------------------|------------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2018-Jun-02, Sat,13:55 | Clear         | Rear end         | P.D. only        | Dry            | South    | Going ahead         | Pick-up truck             | Other motor vehicle | 0       |
|                        |               |                  |                  |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2018-Sep-20, Thu,11:25 | Clear         | Sideswipe        | P.D. only        | Dry            | North    | Changing lanes      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | North    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2018-Oct-13, Sat,11:00 | Clear         | Rear end         | P.D. only        | Dry            | South    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | South    | Making "U" turn     | Automobile, station wagon | Other motor vehicle |         |
| 2018-Dec-20, Thu,10:30 | Clear         | Rear end         | P.D. only        | Dry            | South    | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | South    | Turning left        | Passenger van             | Other motor vehicle |         |
| 2019-Feb-03, Sun,20:09 | Freezing Rain | Angle            | Non-fatal injury | Slush          | South    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | East     | Turning left        | Automobile, station wagon | Other motor vehicle |         |
| 2019-May-23, Thu,14:10 | Clear         | Turning movement | P.D. only        | Dry            | West     | Turning right       | Pick-up truck             | Other motor vehicle | 0       |
|                        |               |                  |                  |                | East     | Turning left        | Automobile, station wagon | Other motor vehicle |         |
| 2019-Jun-18, Tue,11:02 | Clear         | Angle            | Non-fatal injury | Dry            | South    | Going ahead         | Bicycle                   | Other motor vehicle | 0       |
|                        |               |                  |                  |                | West     | Turning right       | Automobile, station wagon | Cyclist             |         |
| 2019-Aug-22, Thu,10:42 | Clear         | Angle            | P.D. only        | Dry            | North    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | East     | Turning left        | Delivery van              | Other motor vehicle |         |
| 2019-Aug-23, Fri,17:00 | Clear         | SMV other        | Non-fatal injury | Dry            | North    | Slowing or stopping | Motorcycle                | Skidding/sliding    | 0       |
| 2019-Oct-19, Sat,09:56 | Clear         | Turning movement | P.D. only        | Dry            | North    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | South    | Turning left        | Automobile, station wagon | Other motor vehicle |         |
| 2019-Nov-16, Sat,17:00 | Clear         | Angle            | P.D. only        | Dry            | South    | Slowing or stopping | Passenger van             | Other motor vehicle | 0       |
|                        |               |                  |                  |                | East     | Turning left        | Automobile, station wagon | Other motor vehicle |         |
| 2019-Nov-24, Sun,17:11 | Clear         | Rear end         | Non-fatal injury | Dry            | North    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | North    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** TERRY FOX DR @ EDGEWATER ST/CHARLIE ROGERS PL

**Traffic Control:** Traffic signal

**Total Collisions:** 40

| Date/Day/Time          | Environment | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|------------------|------------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2019-Dec-05, Thu,22:26 | Clear       | Turning movement | P.D. only        | Dry            | South    | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2020-Feb-24, Mon,14:02 | Clear       | Angle            | Non-fatal injury | Dry            | North    | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | West     | Turning left        | Automobile, station wagon | Other motor vehicle |         |
| 2020-Sep-15, Tue,07:31 | Clear       | Rear end         | Non-fatal injury | Dry            | South    | Going ahead         | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Slowing or stopping | Automobile, station wagon | Other motor vehicle |         |
|                        |             |                  |                  |                | South    | Slowing or stopping | Automobile, station wagon | Other motor vehicle |         |
| 2020-Oct-08, Thu,14:23 | Clear       | Turning movement | P.D. only        | Dry            | South    | Turning left        | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Going ahead         | Pick-up truck             | Other motor vehicle |         |
| 2020-Oct-19, Mon,12:08 | Rain        | Turning movement | P.D. only        | Wet            | South    | Making "U" turn     | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Going ahead         | Delivery van              | Other motor vehicle |         |
| 2020-Dec-08, Tue,17:26 | Clear       | Turning movement | P.D. only        | Dry            | North    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Turning left        | Pick-up truck             | Other motor vehicle |         |
| 2021-Mar-30, Tue,11:00 | Clear       | Sideswipe        | P.D. only        | Dry            | North    | Unknown             | Unknown                   | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2021-Apr-29, Thu,14:49 | Clear       | Rear end         | Non-fatal injury | Dry            | North    | Overtaking          | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Slowing or stopping | Pick-up truck             | Other motor vehicle |         |
|                        |             |                  |                  |                | North    | Turning right       | Pick-up truck             | Other motor vehicle |         |
| 2021-May-21, Fri,19:06 | Clear       | Turning movement | Non-fatal injury | Dry            | North    | Going ahead         | Motorcycle                | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Turning left        | Automobile, station wagon | Other motor vehicle |         |
| 2021-Sep-24, Fri,14:00 | Clear       | Turning movement | Non-fatal injury | Dry            | North    | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2021-Oct-01, Fri,14:55 | Clear       | Sideswipe        | P.D. only        | Dry            | South    | Changing lanes      | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** TERRY FOX DR @ EDGEWATER ST/CHARLIE ROGERS PL

**Traffic Control:** Traffic signal

**Total Collisions:** 40

| Date/Day/Time          | Environment | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|------------------|------------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2021-Oct-08, Fri,11:33 | Clear       | Rear end         | P.D. only        | Dry            | North    | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2021-Nov-24, Wed,07:30 | Clear       | Sideswipe        | P.D. only        | Dry            | South    | Changing lanes      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2021-Dec-01, Wed,09:50 | Clear       | Turning movement | P.D. only        | Dry            | South    | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2021-Dec-13, Mon,12:18 | Clear       | Rear end         | P.D. only        | Dry            | North    | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2021-Dec-18, Sat,20:35 | Snow        | Sideswipe        | P.D. only        | Loose snow     | North    | Unknown             | Unknown                   | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Going ahead         | Passenger van             | Other motor vehicle |         |
| 2022-Jan-23, Sun,13:25 | Clear       | Rear end         | Non-fatal injury | Dry            | North    | Slowing or stopping | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Stopped             | Pick-up truck             | Other motor vehicle |         |
| 2022-Mar-02, Wed,10:50 | Clear       | Rear end         | P.D. only        | Slush          | North    | Going ahead         | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2022-Aug-10, Wed,07:40 | Clear       | Turning movement | P.D. only        | Dry            | South    | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2022-Aug-22, Mon,13:10 | Clear       | Turning movement | Non-fatal injury | Dry            | North    | Turning left        | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2022-Sep-13, Tue,08:45 | Clear       | Turning movement | Non-fatal injury | Dry            | North    | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2022-Oct-04, Tue,11:56 | Clear       | Turning movement | Non-fatal injury | Dry            | South    | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | North    | Going ahead         | Pick-up truck             | Other motor vehicle |         |
| 2022-Oct-18, Tue,13:15 | Clear       | Rear end         | Non-fatal injury | Dry            | South    | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |                  |                  |                | South    | Turning left        | Pick-up truck             | Other motor vehicle |         |

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** TERRY FOX DR @ EDGEWATER ST/CHARLIE ROGERS PL

**Traffic Control:** Traffic signal

**Total Collisions:** 40

| Date/Day/Time          | Environment | Impact Type | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|----------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2022-Nov-18, Fri,15:00 | Clear       | Angle       | P.D. only      | Wet            | North    | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | East     | Turning left      | Automobile, station wagon | Other motor vehicle |         |
| 2022-Dec-08, Thu,12:15 | Clear       | Rear end    | P.D. only      | Dry            | South    | Going ahead       | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |             |                |                | South    | Going ahead       | Passenger van             | Other motor vehicle |         |
| 2022-Dec-20, Tue,16:45 | Clear       | Rear end    | P.D. only      | Dry            | North    | Going ahead       | Passenger van             | Other motor vehicle | 0       |
|                        |             |             |                |                | North    | Going ahead       | Automobile, station wagon | Other motor vehicle |         |

**Location:** TERRY FOX DR @ HALKIRK AVE/WINCHESTER DR

**Traffic Control:** Traffic signal

**Total Collisions:** 21

| Date/Day/Time          | Environment   | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|---------------|------------------|------------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2018-Mar-13, Tue,13:38 | Clear         | Sideswipe        | P.D. only        | Dry            | South    | Changing lanes      | Unknown                   | Other motor vehicle | 0       |
|                        |               |                  |                  |                | South    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2018-Apr-20, Fri,22:13 | Clear         | Turning movement | P.D. only        | Dry            | North    | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | South    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2018-Oct-27, Sat,23:34 | Freezing Rain | Rear end         | P.D. only        | Slush          | East     | Stopped             | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | East     | Slowing or stopping | Automobile, station wagon | Other motor vehicle |         |
| 2018-Dec-16, Sun,11:30 | Clear         | Rear end         | Non-fatal injury | Dry            | South    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2018-Dec-26, Wed,08:56 | Clear         | Rear end         | Non-fatal injury | Dry            | North    | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | North    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2019-Jan-25, Fri,11:34 | Clear         | Rear end         | Non-fatal injury | Wet            | North    | Slowing or stopping | Pick-up truck             | Other motor vehicle | 0       |
|                        |               |                  |                  |                | North    | Slowing or stopping | Automobile, station wagon | Other motor vehicle |         |
| 2019-Mar-07, Thu,18:49 | Clear         | Rear end         | P.D. only        | Dry            | West     | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |               |                  |                  |                | West     | Stopped             | Automobile, station wagon | Other motor vehicle |         |

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** TERRY FOX DR @ HALKIRK AVE/WINCHESTER DR

**Traffic Control:** Traffic signal

**Total Collisions:** 21

| Date/Day/Time           | Environment | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|-------------------------|-------------|------------------|------------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2019-Oct-22, Tue, 17:00 | Rain        | Turning movement | P.D. only        | Wet            | North    | Turning left        | Automobile, station wagon | Other motor vehicle | 0       |
|                         |             |                  |                  |                | South    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2019-Nov-21, Thu, 16:25 | Clear       | Turning movement | P.D. only        | Dry            | South    | Going ahead         | Truck-other               | Other motor vehicle | 0       |
|                         |             |                  |                  |                | North    | Turning left        | Automobile, station wagon | Other motor vehicle |         |
| 2020-Jan-12, Sun, 13:59 | Snow        | Rear end         | Non-fatal injury | Wet            | South    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                         |             |                  |                  |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2020-Feb-26, Wed, 21:05 | Clear       | Rear end         | P.D. only        | Loose snow     | North    | Unknown             | Pick-up truck             | Other motor vehicle | 0       |
|                         |             |                  |                  |                | North    | Unknown             | Automobile, station wagon | Other motor vehicle |         |
| 2020-May-26, Tue, 17:59 | Clear       | Rear end         | P.D. only        | Dry            | South    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                         |             |                  |                  |                | South    | Slowing or stopping | Pick-up truck             | Other motor vehicle |         |
| 2020-Dec-11, Fri, 16:20 | Clear       | Rear end         | P.D. only        | Wet            | South    | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                         |             |                  |                  |                | South    | Slowing or stopping | Automobile, station wagon | Other motor vehicle |         |
|                         |             |                  |                  |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2021-May-01, Sat, 12:01 | Clear       | Angle            | Non-fatal injury | Dry            | South    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                         |             |                  |                  |                | East     | Going ahead         | Passenger van             | Other motor vehicle |         |
| 2021-Jul-31, Sat, 21:51 | Clear       | Rear end         | P.D. only        | Dry            | South    | Going ahead         | Pick-up truck             | Other motor vehicle | 0       |
|                         |             |                  |                  |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
|                         |             |                  |                  |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2021-Sep-13, Mon, 13:17 | Clear       | SMV other        | P.D. only        | Dry            | North    | Turning right       | Automobile, station wagon | Curb                | 0       |
| 2021-Dec-03, Fri, 15:30 | Clear       | Rear end         | P.D. only        | Dry            | South    | Going ahead         | Passenger van             | Other motor vehicle | 0       |
|                         |             |                  |                  |                | South    | Slowing or stopping | Pick-up truck             | Other motor vehicle |         |
| 2022-Jan-28, Fri, 18:30 | Clear       | Turning movement | P.D. only        | Wet            | South    | Turning left        | Pick-up truck             | Other motor vehicle | 0       |
|                         |             |                  |                  |                | North    | Going ahead         | Pick-up truck             | Other motor vehicle |         |

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** TERRY FOX DR @ HALKIRK AVE/WINCHESTER DR

**Traffic Control:** Traffic signal

**Total Collisions:** 21

| Date/Day/Time          | Environment | Impact Type | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|----------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2022-Nov-03, Thu,06:55 | Clear       | Rear end    | P.D. only      | Dry            | South    | Stopped           | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | South    | Going ahead       | Automobile, station wagon | Other motor vehicle |         |
|                        |             |             |                |                | South    | Going ahead       | Automobile, station wagon | Other motor vehicle |         |
| 2022-Nov-15, Tue,08:40 | Clear       | Angle       | P.D. only      | Dry            | East     | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | South    | Turning left      | Automobile, station wagon | Other motor vehicle |         |
| 2022-Nov-15, Tue,08:40 | Clear       | Angle       | P.D. only      | Dry            | South    | Turning left      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | West     | Going ahead       | Automobile, station wagon | Other motor vehicle |         |

**Location:** TERRY FOX DR btwn 135 S OF HAZELDEAN RD & HALKIRK AVE

**Traffic Control:** No control

**Total Collisions:** 4

| Date/Day/Time          | Environment | Impact Type | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|------------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2019-Jul-01, Mon,22:35 | Clear       | Rear end    | Non-fatal injury | Dry            | North    | Slowing or stopping | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | North    | Slowing or stopping | Automobile, station wagon | Other motor vehicle |         |
|                        |             |             |                  |                | North    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
| 2019-Dec-13, Fri,18:12 | Clear       | Sideswipe   | P.D. only        | Dry            | South    | Changing lanes      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                  |                | South    | Going ahead         | Pick-up truck             | Other motor vehicle |         |
| 2020-Jan-18, Sat,10:11 | Clear       | Rear end    | Non-fatal injury | Dry            | South    | Slowing or stopping | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |             |                  |                | South    | Changing lanes      | Automobile, station wagon | Other motor vehicle |         |
|                        |             |             |                  |                | South    | Stopped             | Automobile, station wagon | Other motor vehicle |         |
|                        |             |             |                  |                | North    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2021-Sep-28, Tue,15:32 | Clear       | Rear end    | Non-fatal injury | Dry            | North    | Going ahead         | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |             |                  |                | North    | Stopped             | Pick-up truck             | Other motor vehicle |         |
|                        |             |             |                  |                | North    | Stopped             | Pick-up truck             | Other motor vehicle |         |

# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** TERRY FOX DR btwn 240 S OF EDGEWATER ST/CHARLIE ROGERS PL & EDGEWATER ST/CHARLIE ROGERS PL

**Traffic Control:** No control

**Total Collisions:** 4

| Date/Day/Time          | Environment | Impact Type | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|----------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2018-Jun-12, Tue,16:38 | Clear       | Rear end    | P.D. only      | Dry            | South    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | South    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2018-Jun-16, Sat,17:17 | Clear       | Sideswipe   | P.D. only      | Dry            | South    | Changing lanes      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | South    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2021-Jul-19, Mon,07:42 | Clear       | Rear end    | P.D. only      | Dry            | South    | Slowing or stopping | Truck - dump              | Other motor vehicle | 0       |
|                        |             |             |                |                | South    | Stopped             | Municipal transit bus     | Other motor vehicle |         |
| 2021-Oct-06, Wed,17:01 | Clear       | Rear end    | P.D. only      | Dry            | South    | Unknown             | Unknown                   | Other motor vehicle | 0       |
|                        |             |             |                |                | South    | Stopped             | Municipal transit bus     | Other motor vehicle |         |

**Location:** TERRY FOX DR btwn 240 S OF EDGEWATER ST/CHARLIE ROGERS PL & HAZELDEAN RD

**Traffic Control:** No control

**Total Collisions:** 3

| Date/Day/Time          | Environment | Impact Type | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|----------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2019-Jul-03, Wed,17:30 | Clear       | Rear end    | P.D. only      | Dry            | South    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | South    | Slowing or stopping | Automobile, station wagon | Other motor vehicle |         |
| 2020-Oct-08, Thu,12:30 | Clear       | Sideswipe   | P.D. only      | Dry            | South    | Changing lanes      | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | South    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
| 2022-Dec-01, Thu,18:00 | Clear       | Sideswipe   | P.D. only      | Dry            | North    | Going ahead         | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | North    | Changing lanes      | Automobile, station wagon | Other motor vehicle |         |

**Location:** TERRY FOX DR btwn HAZELDEAN RD & 135 S OF HAZELDEAN RD

**Traffic Control:** No control

**Total Collisions:** 5

| Date/Day/Time          | Environment | Impact Type | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre | Vehicle type  | First Event         | No. Ped |
|------------------------|-------------|-------------|----------------|----------------|----------|-------------------|---------------|---------------------|---------|
| 2018-Dec-11, Tue,22:04 | Clear       | Sideswipe   | P.D. only      | Wet            | South    | Changing lanes    | Unknown       | Other motor vehicle | 0       |
|                        |             |             |                |                | South    | Going ahead       | Pick-up truck | Other motor vehicle |         |



# Transportation Services - Traffic Services

## Collision Details Report - Public Version

**From:** January 1, 2018 **To:** December 31, 2022

**Location:** TERRY FOX DR btwn HAZELDEAN RD & 135 S OF HAZELDEAN RD

**Traffic Control:** No control

**Total Collisions:** 5

| Date/Day/Time          | Environment | Impact Type | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuver | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|-------------|----------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2018-Dec-30, Sun,11:25 | Snow        | Sideswipe   | P.D. only      | Wet            | South    | Changing lanes    | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | South    | Going ahead       | Automobile, station wagon | Other motor vehicle |         |
| 2020-Nov-20, Fri,17:24 | Clear       | Rear end    | P.D. only      | Dry            | South    | Going ahead       | Pick-up truck             | Other motor vehicle | 0       |
|                        |             |             |                |                | South    | Stopped           | Pick-up truck             | Other motor vehicle |         |
|                        |             |             |                |                | South    | Stopped           | Pick-up truck             | Other motor vehicle |         |
| 2021-Jul-15, Thu,13:00 | Clear       | Sideswipe   | P.D. only      | Dry            | South    | Changing lanes    | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | South    | Going ahead       | Automobile, station wagon | Other motor vehicle |         |
| 2022-Nov-03, Thu,18:10 | Clear       | Rear end    | P.D. only      | Dry            | North    | Going ahead       | Automobile, station wagon | Other motor vehicle | 0       |
|                        |             |             |                |                | North    | Stopped           | Automobile, station wagon | Other motor vehicle |         |
|                        |             |             |                |                | North    | Stopped           | Automobile, station wagon | Other motor vehicle |         |

## **APPENDIX F**

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### Other Area Developments

## 1.0 SCREENING

### 1.1 Introduction

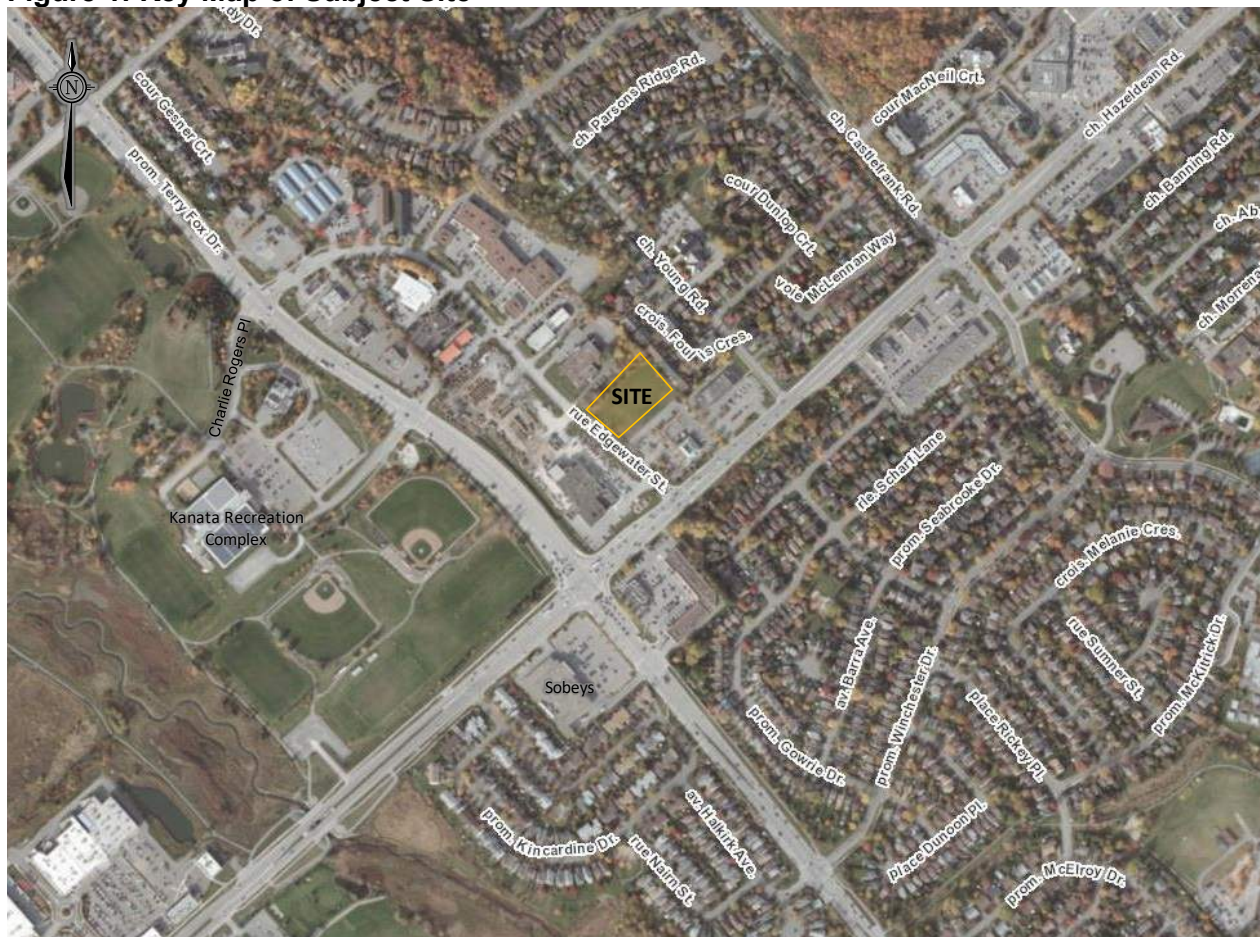
This revised Transportation Impact Assessment (TIA) report has been prepared in support of Zoning Amendment and Site Plan applications for 16 Edgewater Street.

The subject site is surrounded by the following:

- Light industrial uses fronting Edgewater Street to the north;
- Residential uses to the east;
- Fast food restaurant and Hazeldean Road to the south; and
- Edgewater Street and light industrial to the west.

The location and surrounding context are shown in **Figure 1**.

**Figure 1: Key Map of Subject Site**



GeoOttawa

Residential

- 35% to/from the north via Terry Fox Drive
- 25% to/from the east via Hazeldean Road
- 20% to/from the south via Terry Fox Drive
- 20% to/from the west via Hazeldean Road

Commercial/Office

- 25% to/from the north via Terry Fox Drive
- 15% to/from the east via Hazeldean Road
- 30% to/from the south via Terry Fox Drive
- 30% to/from the west via Hazeldean Road

Site generated traffic volumes are shown in **Figure 6**.

**Figure 6: Site Generated Traffic**

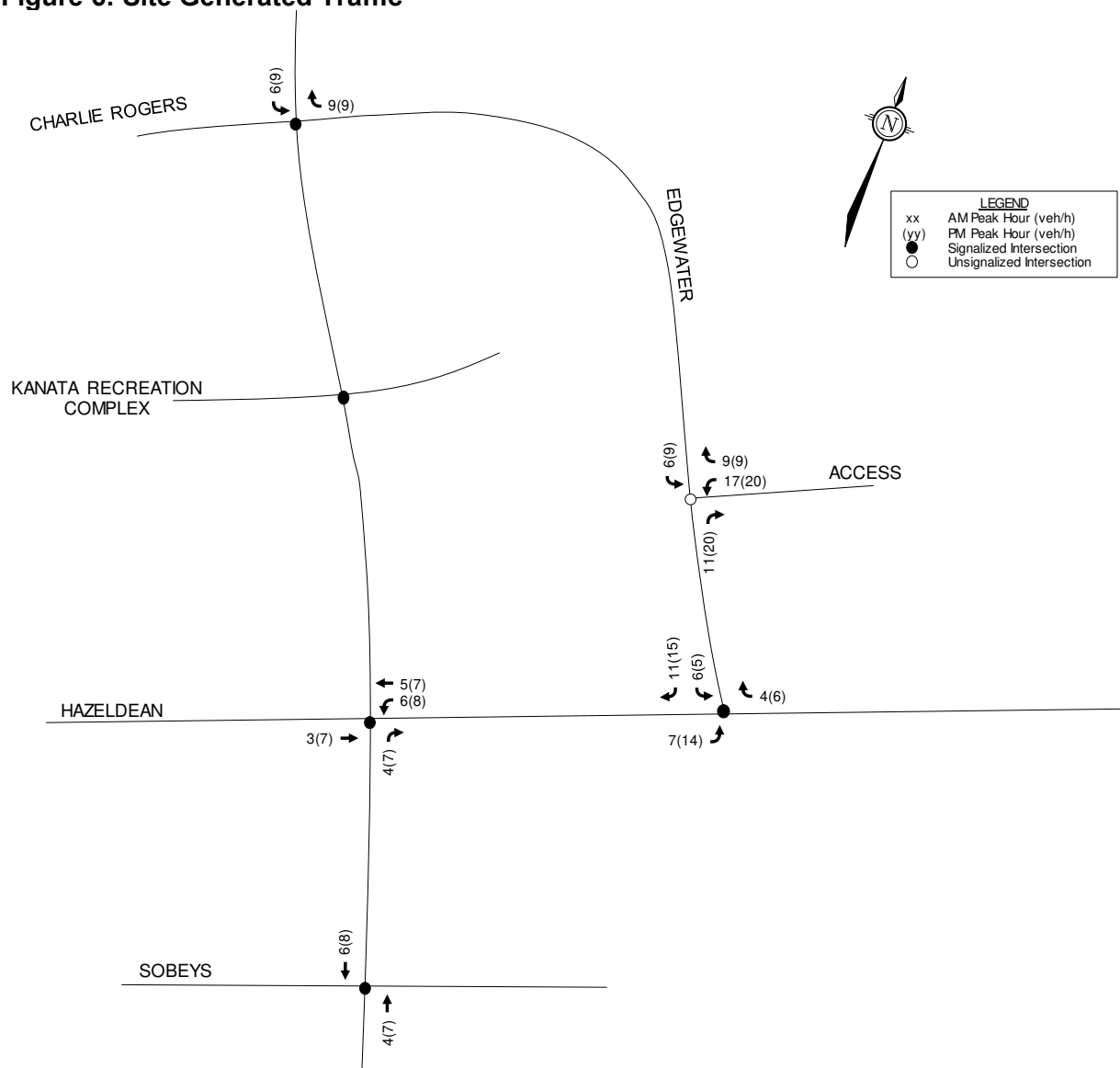
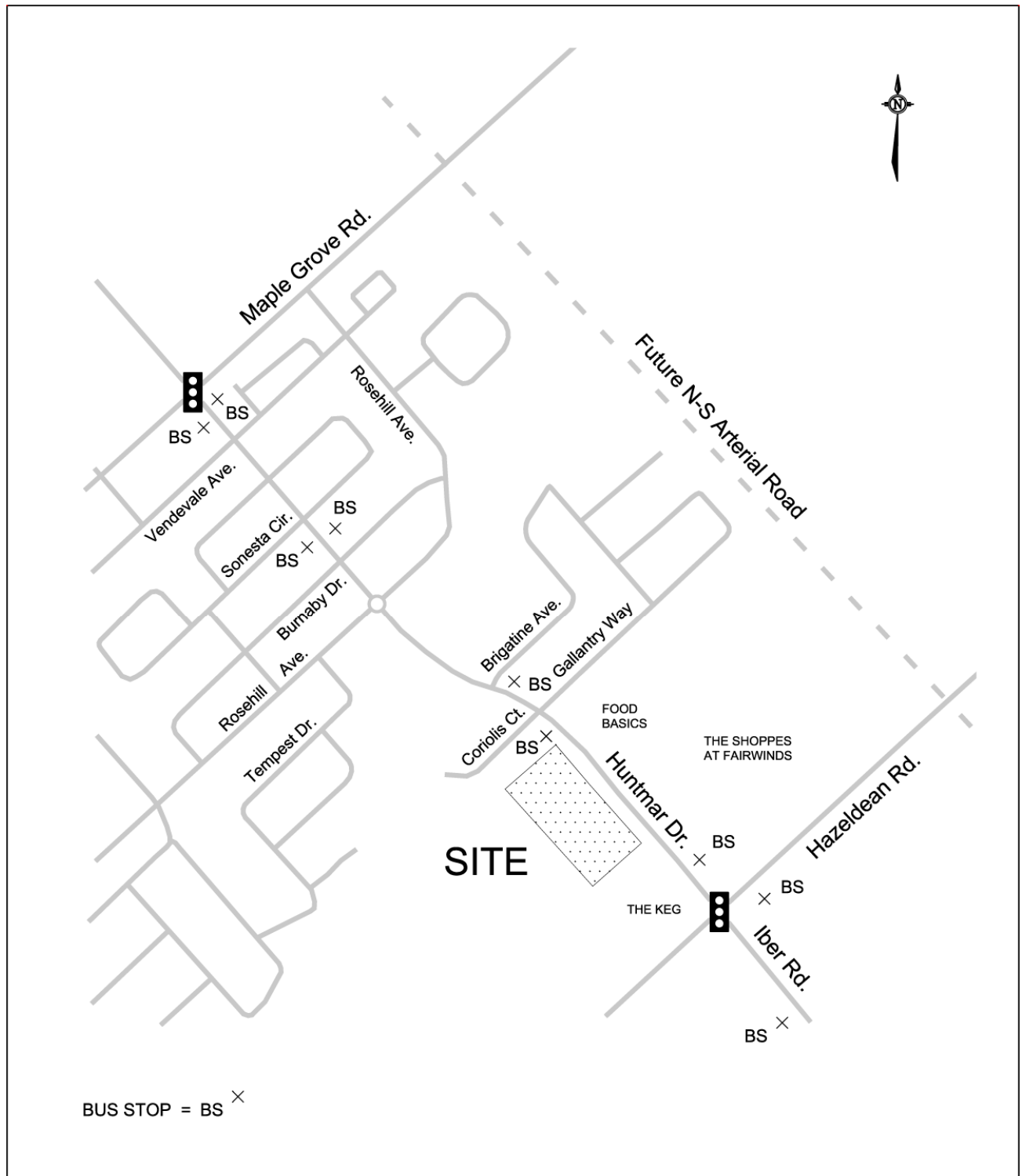
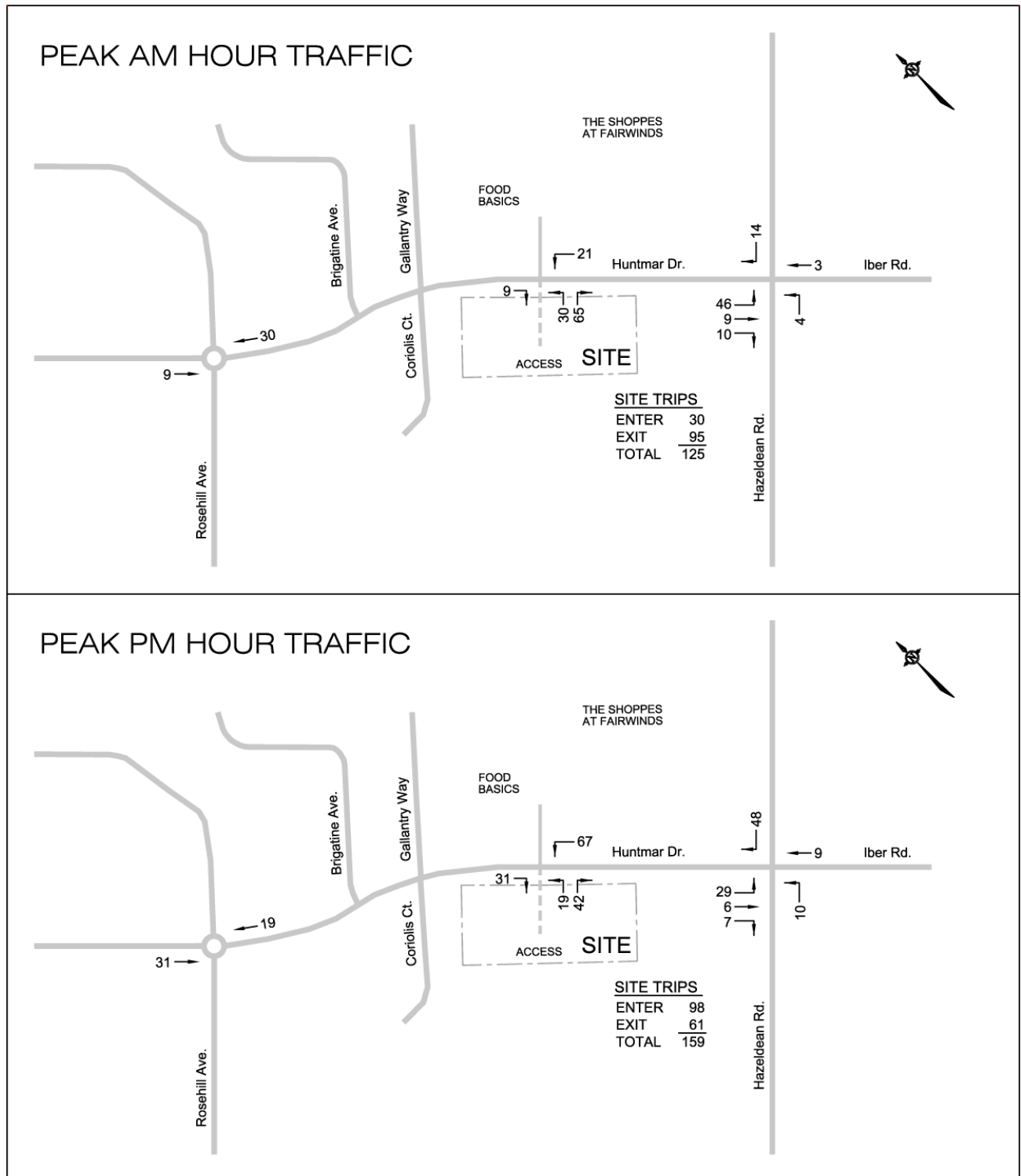


**FIGURE 2.1**  
**SITE LOCATION PLAN**

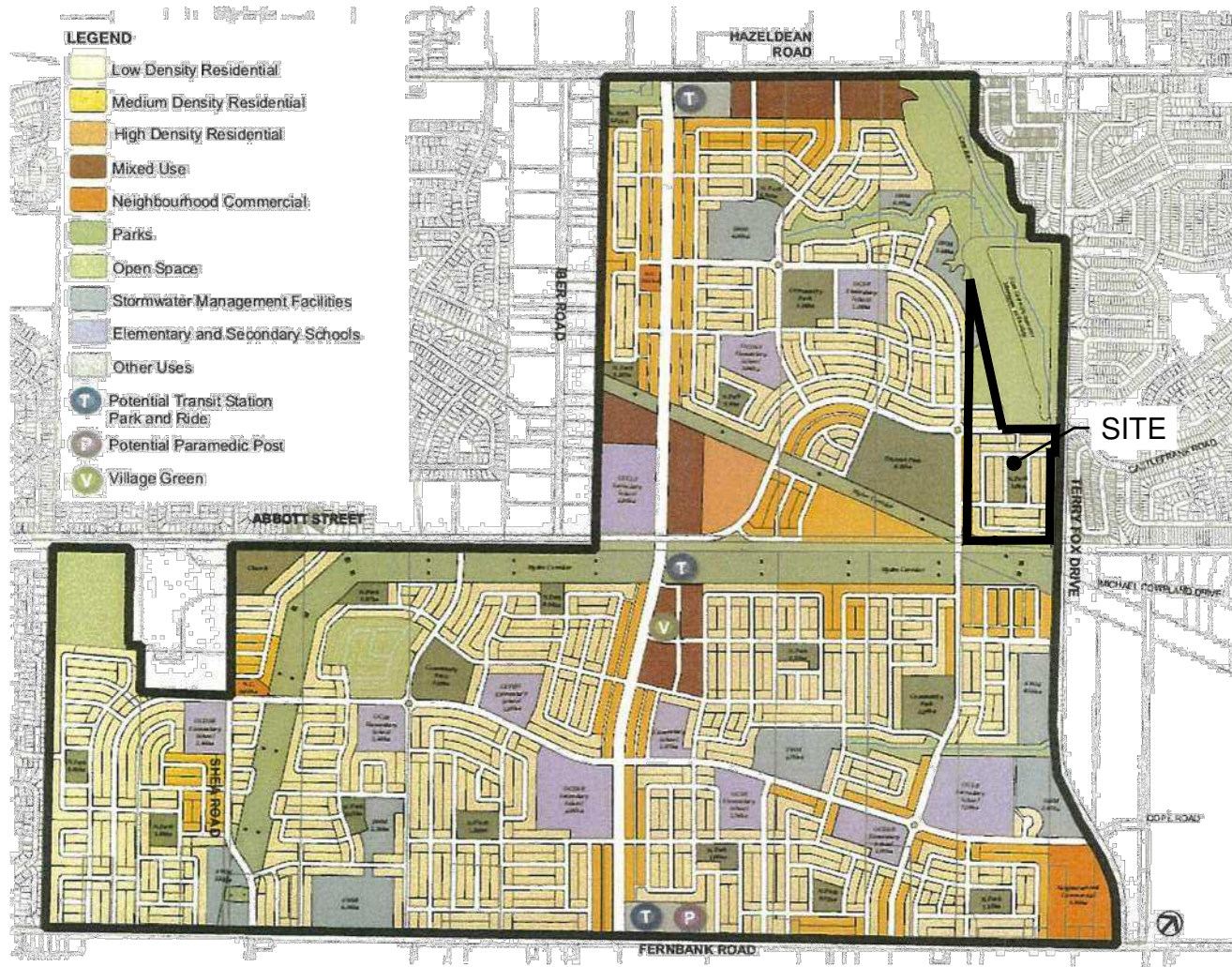


NOT TO SCALE

**FIGURE 3.1**  
**PEAK AM AND PM HOUR SITE GENERATED TRIPS**







# NOVATECH

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Website [www.novatech-eng.com](http://www.novatech-eng.com)

3558584 CANADA INC.  
(SPB DEVELOPMENTS INC.)

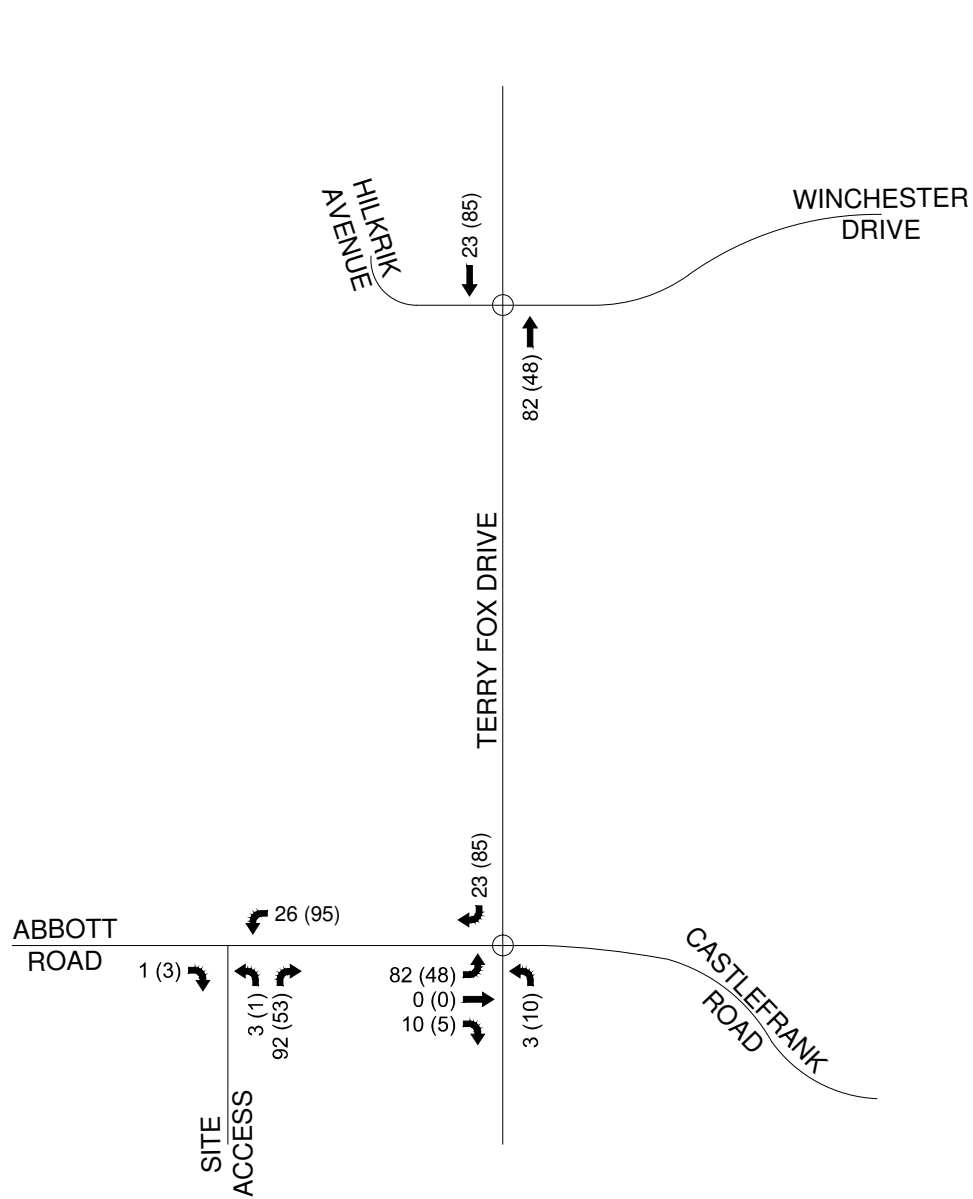
FERNBANK COMMUNITY  
DESIGN PLAN

JUN 2014

110037

FIGURE 1

M:\2010\110037\CAD\Design\110037-T.dwg, FIGURE 4, Jul 24, 2014 - 11:04am, lseely



### LEGEND

- Unsignalized Intersection
- Signalized Intersection
- xx VPH AM Peak Hour
- (xx) VPH PM Peak Hour



Engineers, Planners & Landscape Architects

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3558584 CANADA INC.  
(SPB DEVELOPMENTS INC.)

TOTAL PEAK HOUR SITE  
TRAFFIC VOLUMES

JUN 2014

110037

FIGURE 4

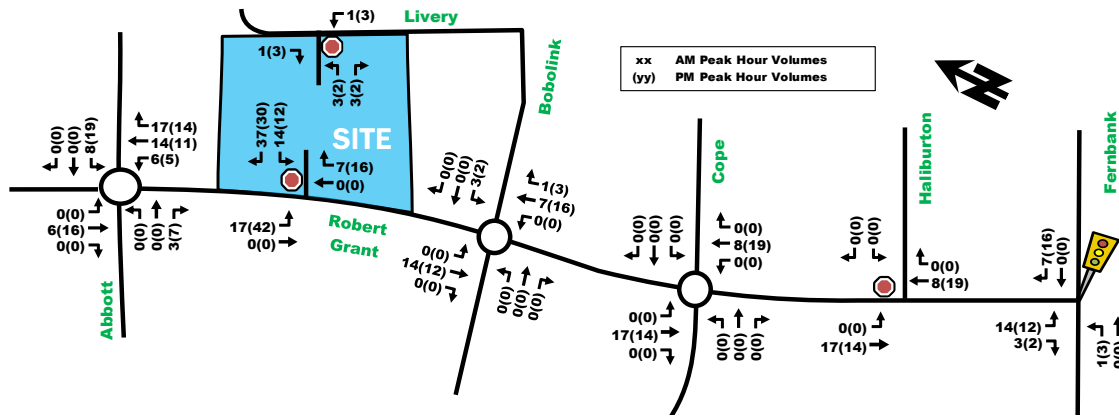


Figure 1: Local Context



The anticipated 'new' auto trips for the proposed development from **Table 8** were then assigned to the road network with the distribution shown above, as shown in **Figure 17**, for the total site-generated traffic for TRANS mode share.

Figure 17: Site-Generated Traffic Using TRANS Mode Shares



## 3.2. Background Network Traffic

### 3.2.1. Transportation Network Plans

Refer to **Section 2.1.3: Planned Conditions**.

### 3.2.2. Background Growth and Other Area Developments

The Stittsville district and areas south of the development are still ripe for future growth, with farm fields and empty lots destined for suburban developments. As described in **Section 2.1.3**, there are significant number of new developments proposed. A large amount of these future developments have been documented and will be layered on individually. Some parcels have a general proposed land use but have not been refined or finalized, with no future traffic volumes forecasted yet.

Overall, all the possible developable areas within a 1km radius have been captured in other area developments as shown in **Section 2.1.3**. Today, there are limited transit options available within the study area, promoting driving behaviors. Once the area matures and transit services increase, it is anticipated that less people will drive within the study area. For this reason, a 0% annual growth rate is considered adequate given that all known other area developments within the 1km radius have been accounted for in background volumes and commuting habits will likely change over time, conducive to other modes of transportation that are not driving.

### 3.2.3. Future Background Volumes

The total number of new other area development vehicle trips projected to use study area intersections have been illustrated in **Figure 18** and **Figure 19** for 2025 and 2030 respectively.



## 1.0 INTRODUCTION

This combined Community Transportation Study (CTS) and Transportation Impact Study (TIS) has been prepared in support of Zoning By-Law Amendment and Draft Plan of Subdivision applications for the lands located at 5618 Hazeldean Road. The subject lands are shown in **Figures 1** and **2** below and are henceforth referred to as the Kizell Lands.

**Figure 1: Local Area Context**



**Figure 2: Hazeldean Road Context**



Figure 6: Site Generated Traffic Volumes – Scenario One

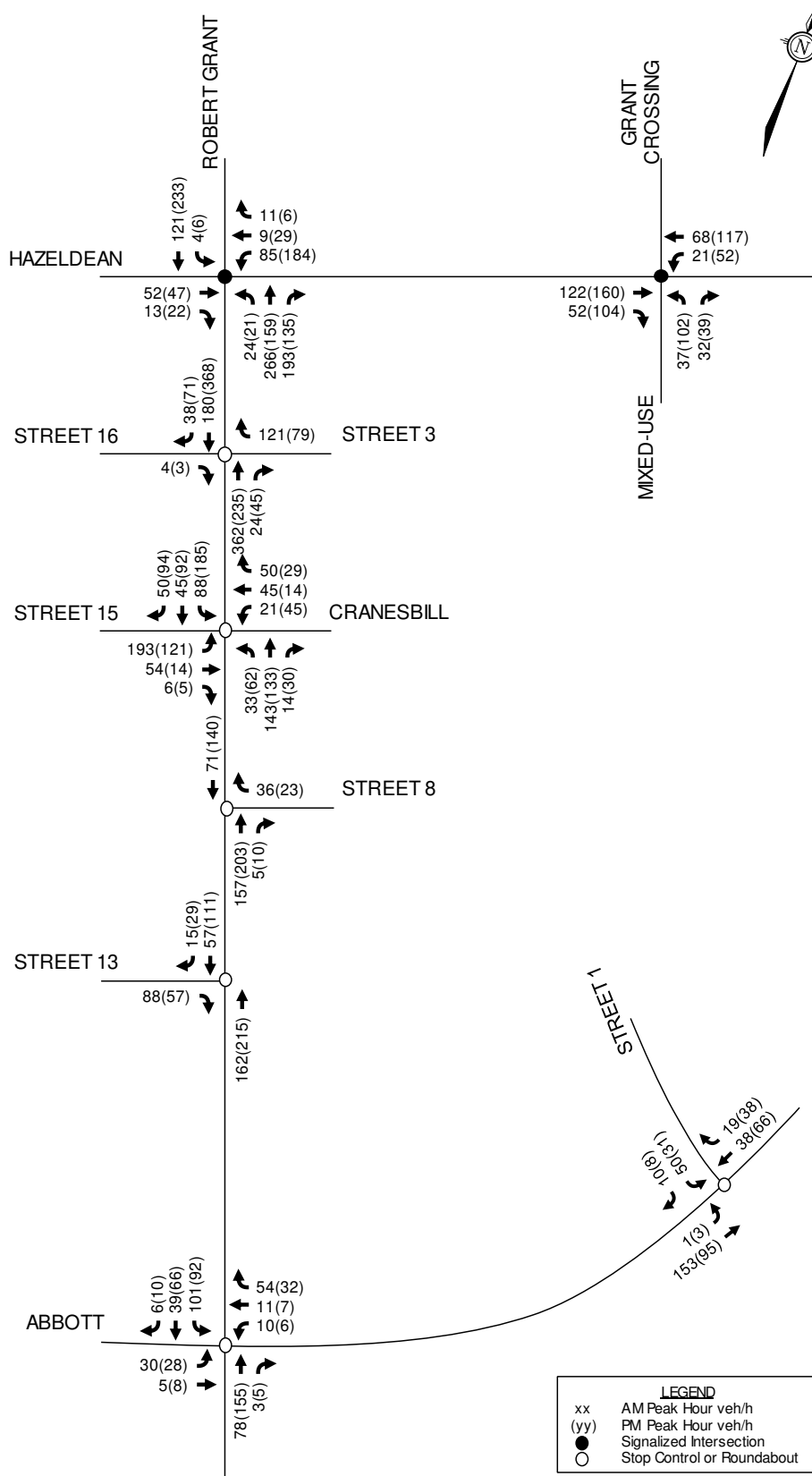
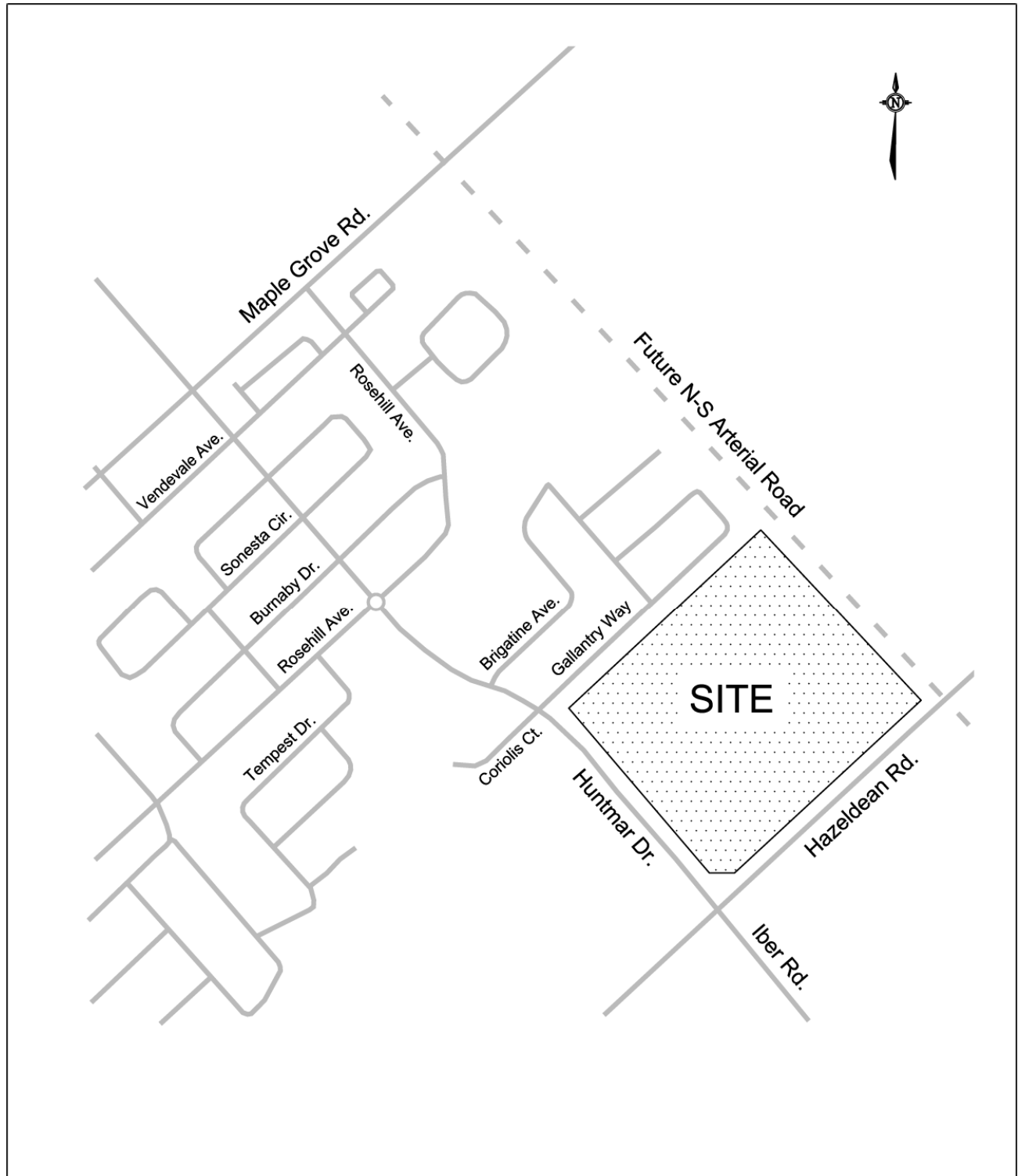
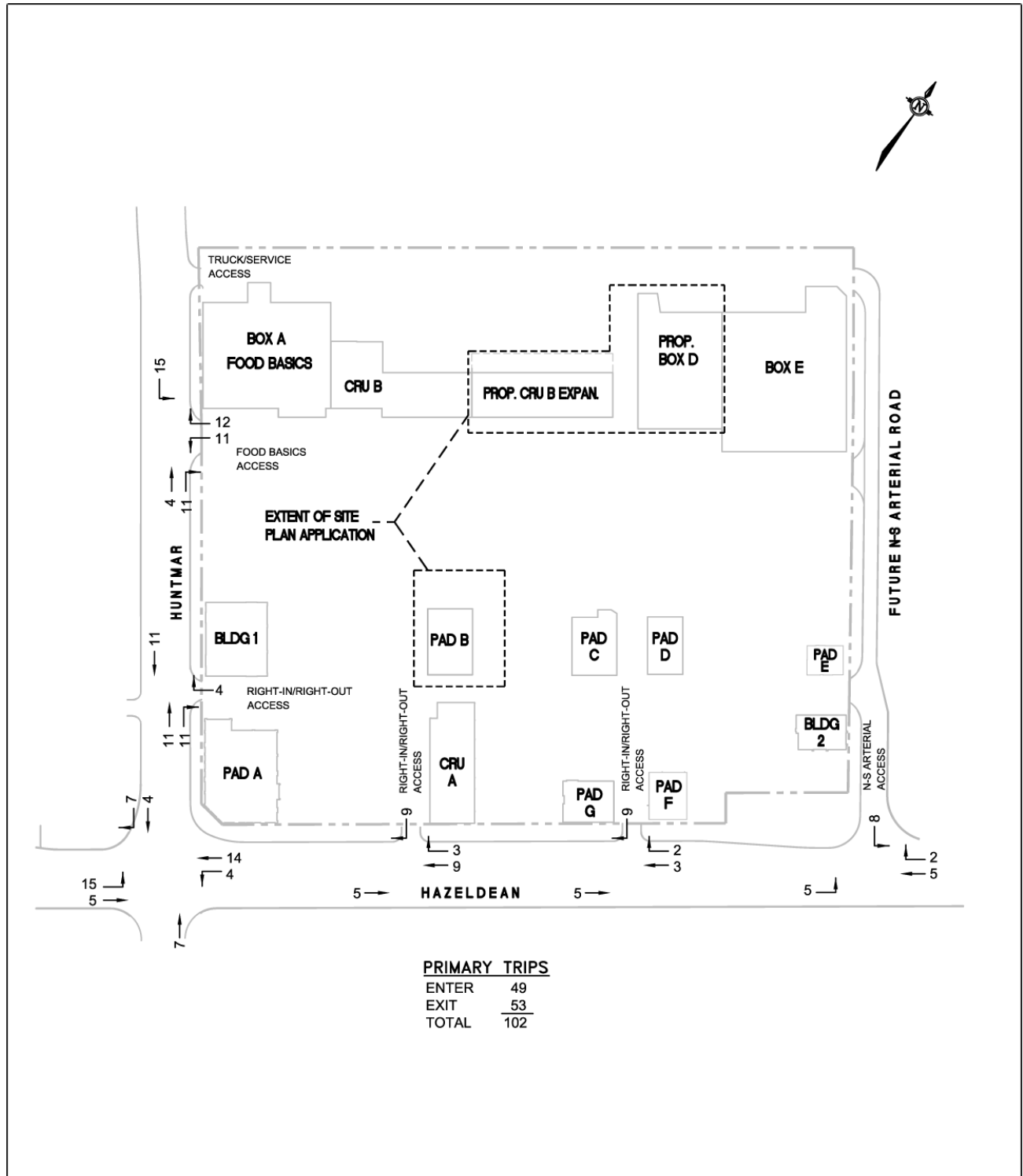


**FIGURE 2.1**  
**SITE LOCATION PLAN**



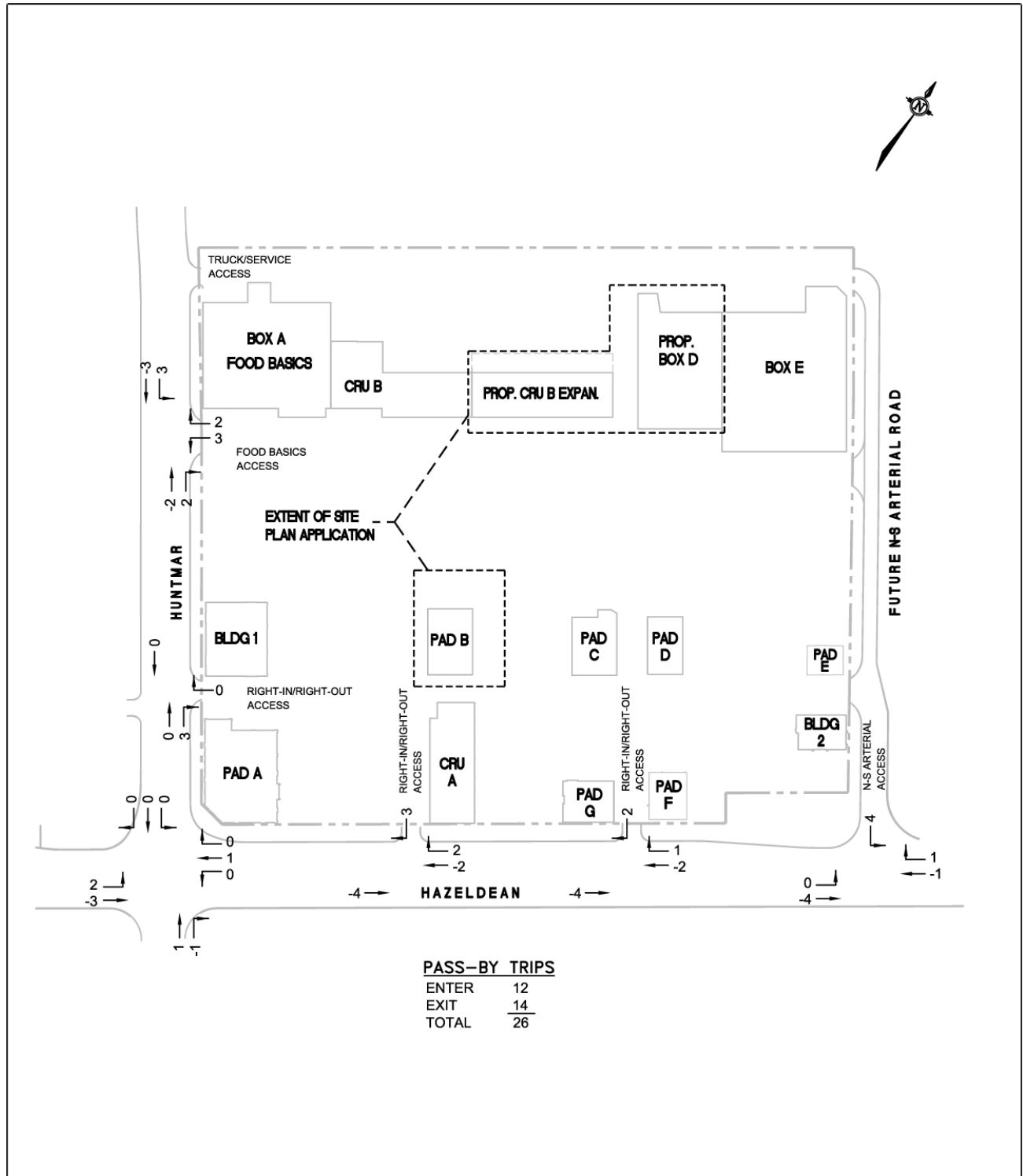
NOT TO SCALE

**FIGURE 3.1**  
**PEAK PM HOUR SITE GENERATED PRIMARY TRIPS**



NOT TO SCALE

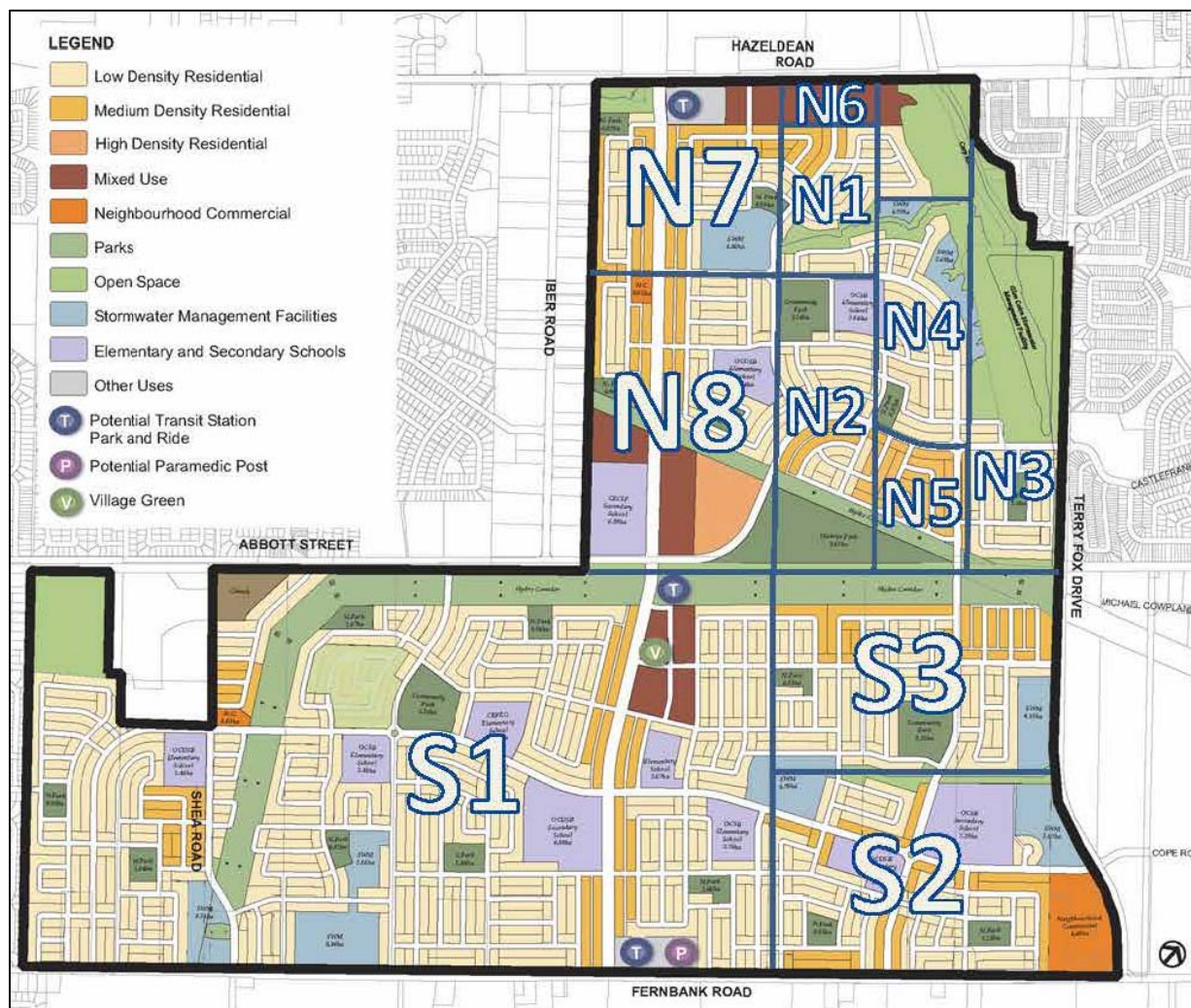
**FIGURE 3.2**  
**PEAK PM HOUR SITE GENERATED PASS-BY TRIPS**



NOT TO SCALE



**Figure 10  
Fernbank Community Traffic Zones**



### 3.4.2 Background Traffic Growth

Consistent with the Fernbank CDP TMP and with other recent transportation studies prepared for development parcels within the Fernbank Community, a 2% annual growth rate was deemed to be appropriate. This rate was then applied to the existing traffic volumes at the study area intersections until the 2025 horizon. In addition, the trips generated by the other areas of the Fernbank Community (i.e. all areas excluding the subject Richcraft site) were added to the boundary road network.

### 3.4.3 Future Background Traffic Conditions

The build-out horizons for the background developments must recognize the scale of the developments under consideration. An absorption rate of 500 units per year was applied to the background



**Table 3  
Fernbank Community Traffic Generation**

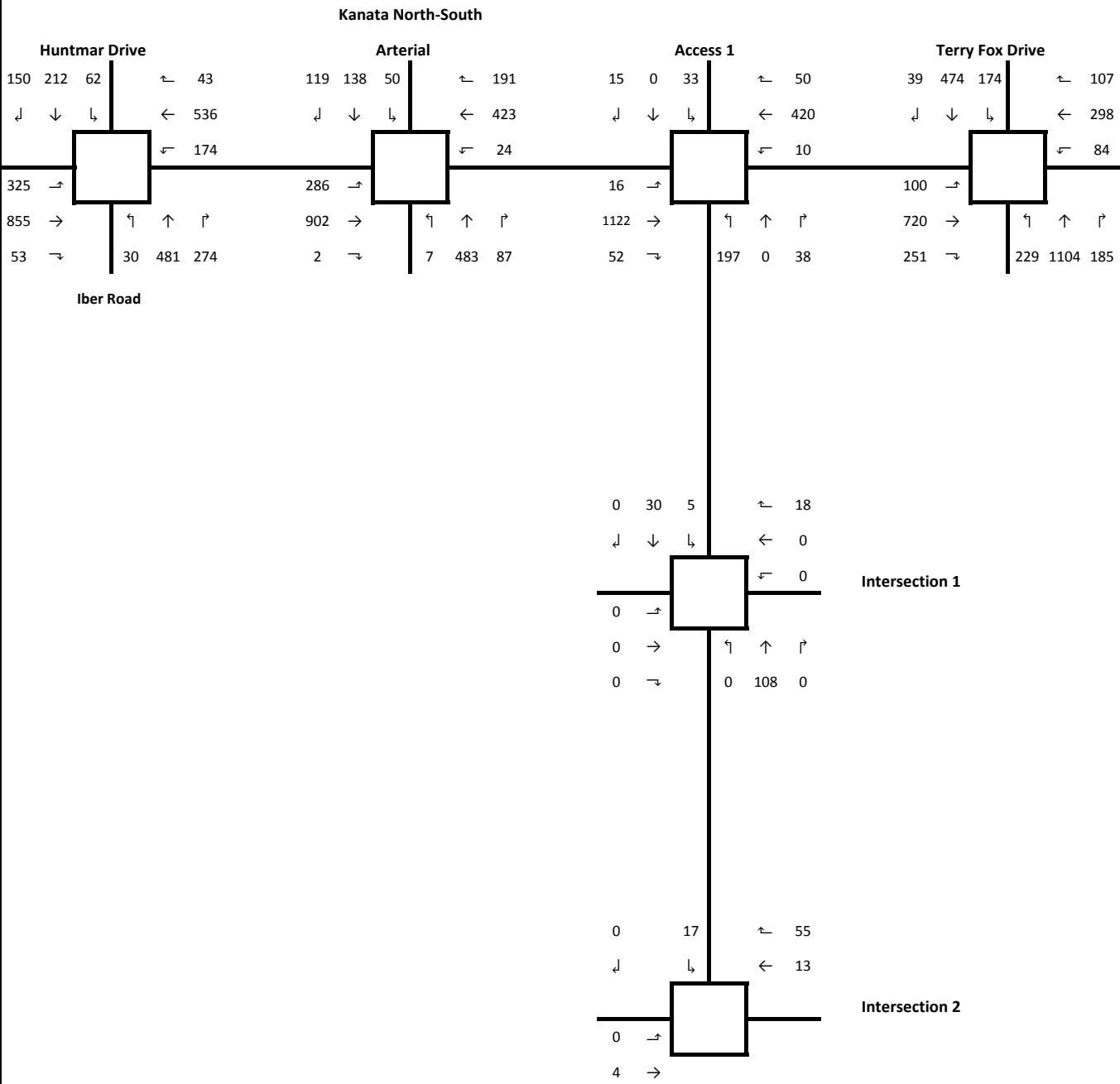
| Zone                  | Modes                      | Split | Morning Peak Hour |     |       | Afternoon Peak Hour |     |       |
|-----------------------|----------------------------|-------|-------------------|-----|-------|---------------------|-----|-------|
|                       |                            |       | In                | Out | Total | In                  | Out | Total |
| <b>N1 (Richcraft)</b> | Auto                       | 55%   | 29                | 109 | 138   | 113                 | 62  | 174   |
|                       | Passenger                  | 15%   | 8                 | 30  | 38    | 31                  | 17  | 48    |
|                       | Transit                    | 25%   | 13                | 50  | 63    | 51                  | 28  | 79    |
|                       | Active Modes               | 5%    | 3                 | 10  | 13    | 10                  | 6   | 16    |
|                       | N1 Subtotal (person trips) | 100%  | 53                | 198 | 251   | 205                 | 112 | 317   |
| <b>N2 (Richcraft)</b> | Auto                       | 55%   | 30                | 123 | 154   | 125                 | 65  | 190   |
|                       | Passenger                  | 15%   | 8                 | 34  | 42    | 34                  | 18  | 52    |
|                       | Transit                    | 25%   | 14                | 56  | 70    | 57                  | 30  | 87    |
|                       | Active Modes               | 5%    | 3                 | 11  | 14    | 11                  | 6   | 17    |
|                       | N2 Subtotal (person trips) | 100%  | 55                | 224 | 280   | 227                 | 119 | 346   |
| <b>N3</b>             | Auto                       | 55%   | 23                | 69  | 91    | 76                  | 44  | 121   |
|                       | Passenger                  | 15%   | 6                 | 19  | 25    | 21                  | 12  | 33    |
|                       | Transit                    | 25%   | 10                | 31  | 42    | 35                  | 20  | 55    |
|                       | Active Modes               | 5%    | 2                 | 6   | 8     | 7                   | 4   | 11    |
|                       | N3 Subtotal (person trips) | 100%  | 41                | 125 | 166   | 139                 | 80  | 220   |
| <b>N4</b>             | Auto                       | 55%   | 36                | 126 | 162   | 133                 | 74  | 207   |
|                       | Passenger                  | 15%   | 10                | 34  | 44    | 36                  | 20  | 57    |
|                       | Transit                    | 25%   | 16                | 57  | 74    | 61                  | 34  | 94    |
|                       | Active Modes               | 5%    | 3                 | 11  | 15    | 12                  | 7   | 19    |
|                       | N4 Subtotal (person trips) | 100%  | 65                | 229 | 294   | 242                 | 134 | 377   |
| <b>N5</b>             | Auto                       | 55%   | 24                | 84  | 108   | 89                  | 50  | 138   |
|                       | Passenger                  | 15%   | 6                 | 23  | 30    | 24                  | 14  | 38    |
|                       | Transit                    | 25%   | 11                | 38  | 49    | 41                  | 23  | 63    |
|                       | Active Modes               | 5%    | 2                 | 8   | 10    | 8                   | 5   | 13    |
|                       | N5 Subtotal (person trips) | 100%  | 43                | 152 | 197   | 162                 | 90  | 251   |
| <b>N6 (Richcraft)</b> | Auto                       | 55%   | 3                 | 7   | 10    | 6                   | 4   | 10    |
|                       | Passenger                  | 15%   | 1                 | 2   | 3     | 2                   | 1   | 3     |
|                       | Transit                    | 25%   | 2                 | 3   | 5     | 3                   | 2   | 5     |
|                       | Active Modes               | 5%    | 0                 | 1   | 1     | 1                   | 0   | 1     |
|                       | N6 Subtotal (person trips) | 100%  | 6                 | 12  | 18    | 10                  | 8   | 19    |
| <b>N7</b>             | Auto                       | 55%   | 73                | 281 | 353   | 285                 | 153 | 439   |

|                                          |                                    |      |     |      |      |      |      |      |
|------------------------------------------|------------------------------------|------|-----|------|------|------|------|------|
|                                          | Passenger                          | 15%  | 20  | 77   | 96   | 78   | 42   | 120  |
|                                          | Transit                            | 25%  | 33  | 128  | 161  | 130  | 70   | 200  |
|                                          | Active Modes                       | 5%   | 7   | 26   | 32   | 26   | 14   | 40   |
|                                          | N7 Subtotal (person trips)         | 100% | 132 | 510  | 642  | 518  | 278  | 798  |
| <b>N8</b>                                | Auto                               | 55%  | 87  | 347  | 435  | 349  | 185  | 535  |
|                                          | Passenger                          | 15%  | 24  | 95   | 119  | 95   | 51   | 146  |
|                                          | Transit                            | 25%  | 40  | 158  | 198  | 159  | 84   | 243  |
|                                          | Active Modes                       | 5%   | 8   | 32   | 40   | 32   | 17   | 49   |
|                                          | N8 Subtotal (person trips)         | 100% | 158 | 631  | 790  | 635  | 337  | 972  |
| <b>S1</b>                                | Auto                               | 55%  | 503 | 1604 | 2108 | 1756 | 1009 | 2765 |
|                                          | Passenger                          | 15%  | 137 | 438  | 575  | 479  | 275  | 754  |
|                                          | Transit                            | 25%  | 229 | 729  | 958  | 798  | 459  | 1257 |
|                                          | Active Modes                       | 5%   | 46  | 146  | 192  | 160  | 92   | 251  |
|                                          | S1 Subtotal (person trips)         | 100% | 914 | 2917 | 3833 | 3193 | 1835 | 5028 |
| <b>S2</b>                                | Auto                               | 55%  | 91  | 314  | 405  | 334  | 187  | 521  |
|                                          | Passenger                          | 15%  | 25  | 86   | 111  | 91   | 51   | 142  |
|                                          | Transit                            | 25%  | 42  | 143  | 184  | 152  | 85   | 237  |
|                                          | Active Modes                       | 5%   | 8   | 29   | 37   | 30   | 17   | 47   |
|                                          | S2 Subtotal (person trips)         | 100% | 166 | 571  | 737  | 607  | 340  | 947  |
| <b>S3</b>                                | Auto                               | 55%  | 93  | 321  | 414  | 342  | 191  | 532  |
|                                          | Passenger                          | 15%  | 25  | 87   | 113  | 93   | 52   | 145  |
|                                          | Transit                            | 25%  | 42  | 146  | 188  | 156  | 87   | 242  |
|                                          | Active Modes                       | 5%   | 8   | 29   | 38   | 31   | 17   | 48   |
|                                          | S3 Subtotal (person trips)         | 100% | 169 | 583  | 752  | 622  | 347  | 968  |
| <b>Richcraft Totals</b>                  | Auto                               | 55%  | 63  | 239  | 302  | 243  | 131  | 375  |
|                                          | Passenger                          | 15%  | 17  | 65   | 82   | 66   | 36   | 102  |
|                                          | Transit                            | 25%  | 29  | 109  | 137  | 111  | 60   | 171  |
|                                          | Active Modes                       | 5%   | 6   | 22   | 27   | 22   | 12   | 34   |
|                                          | Richcraft Subtotals (person trips) | 100% | 114 | 434  | 549  | 442  | 239  | 682  |
| <b>2020 Background Trips (25% Total)</b> | Auto                               | 55%  | 232 | 786  | 1019 | 841  | 473  | 1315 |
|                                          | Passenger                          | 15%  | 63  | 214  | 278  | 229  | 129  | 359  |
|                                          | Transit                            | 25%  | 106 | 357  | 463  | 382  | 215  | 598  |
|                                          | Active Modes                       | 5%   | 21  | 71   | 93   | 76   | 43   | 120  |

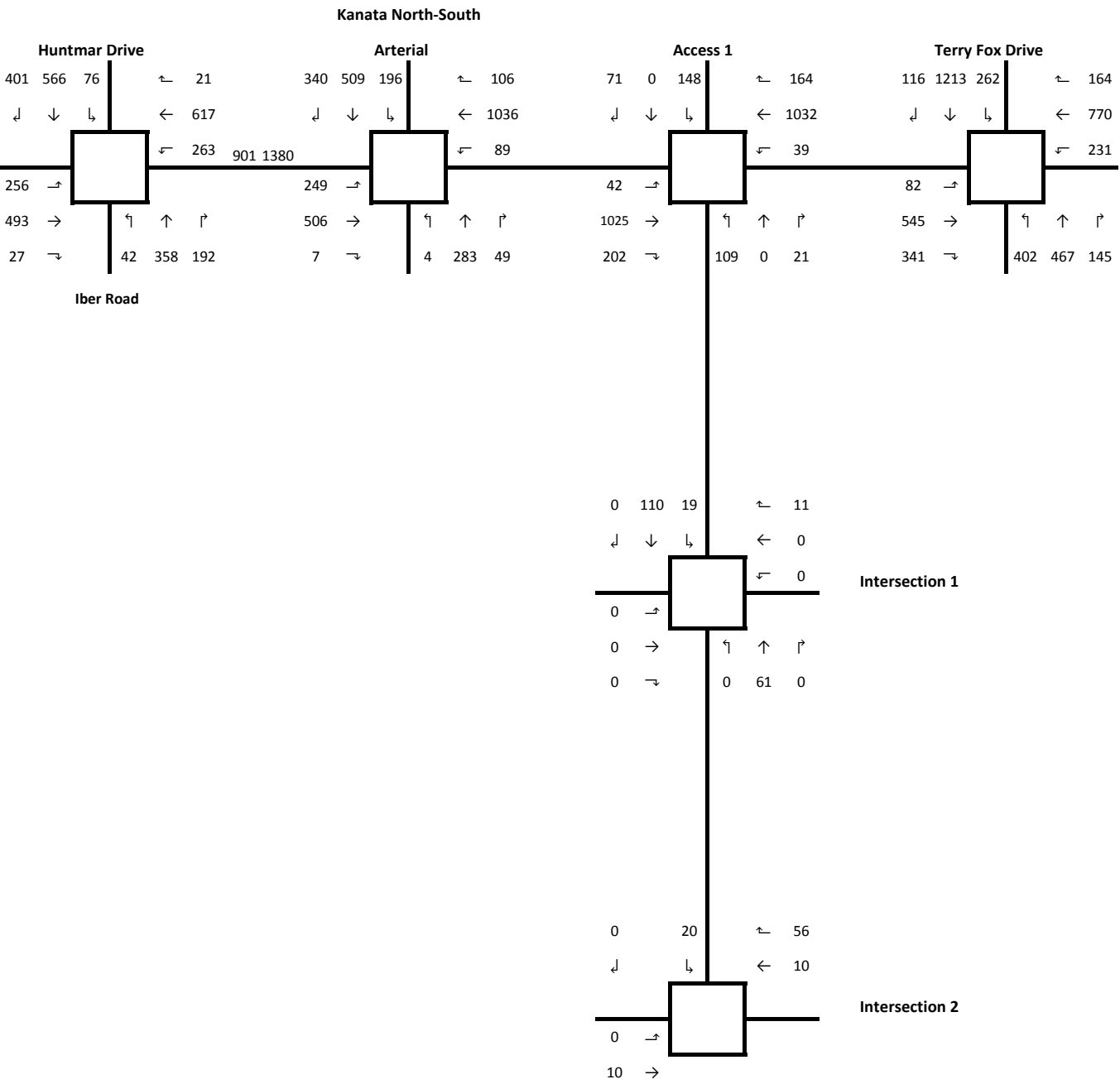
**590 HAZELDEAN ROAD, OTTAWA, ON  
TRANSPORTATION IMPACT STUDY  
SEPTEMBER 2013**

|                                                      |                            |      |      |      |      |      |      |       |
|------------------------------------------------------|----------------------------|------|------|------|------|------|------|-------|
|                                                      | Subtotal<br>(person trips) | 100% | 422  | 1430 | 1853 | 1530 | 860  | 2390  |
| <b>2025<br/>Background<br/>Trips (50%<br/>Total)</b> | Auto                       | 55%  | 464  | 1572 | 2038 | 1682 | 946  | 2629  |
|                                                      | Passenger                  | 15%  | 127  | 429  | 556  | 459  | 258  | 717   |
|                                                      | Transit                    | 25%  | 211  | 715  | 926  | 765  | 430  | 1195  |
|                                                      | Active Modes               | 5%   | 42   | 143  | 185  | 153  | 86   | 239   |
|                                                      | Subtotal<br>(person trips) | 100% | 844  | 2859 | 3706 | 3059 | 1721 | 4781  |
| <b>Fernbank<br/>Total</b>                            | Auto                       | 55%  | 991  | 3384 | 4378 | 3608 | 2024 | 5634  |
|                                                      | Passenger                  | 15%  | 270  | 923  | 1194 | 984  | 552  | 1536  |
|                                                      | Transit                    | 25%  | 451  | 1538 | 1990 | 1640 | 920  | 2561  |
|                                                      | Active Modes               | 5%   | 90   | 308  | 398  | 328  | 184  | 512   |
|                                                      | Subtotal<br>(person trips) | 100% | 1802 | 6152 | 7960 | 6560 | 3680 | 10243 |

AM PEAK



PM PEAK



Stantec Consulting Ltd.  
1331 Clyde Avenue  
ON, Canada K2C 3G4  
Tel: (613) 722-4420  
www.stantec.com



FIGURE: 14  
TITLE: 2025 Ultimate Traffic Volumes  
CLIENT: Richcraft Homes  
PROJECT: 590 Hazeldean Road

## **APPENDIX G**

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### Long-Range Model Snapshots

# TRANS Regional Model

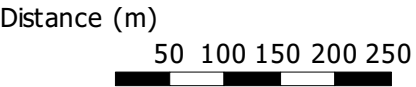
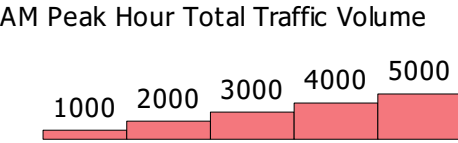
Version 1.01 - Assigned December 09, 2024

**AM Peak Hour Total Traffic Volume**  
**Hazeldean Road @ Roger Griffiths Avenue**  
2022 Model

User Initials: AJ  
Plot Prepared: March 27, 2025  
EMME Scenario: 22002



## Legend



The TRANS model is continuously refined & maintained, and all information is provided in good faith. However, model outputs are provided "as is", and no warranty or guarantee is provided as to the accuracy, reliability or reasonableness of the results. In using this data, you agree to accept any and all risks arising from any incorrect, incomplete, or misleading information.

Recipients are required to use caution and professional judgement in using and interpreting model outputs. In particular, caution should be used when focusing on a geographically limited area (such as a single road or intersection), as the model is primarily designed to simulate regional-scale phenomena and has been calibrated at a regional level.

As general good practice, it is recommended that the user confirm the network coding within the area of interest, and compare base year forecasts against traffic count data to assess the extent to which the model may be over- or under-estimating the travel demand.

TRANS Regional Model

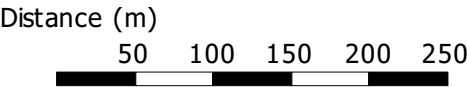
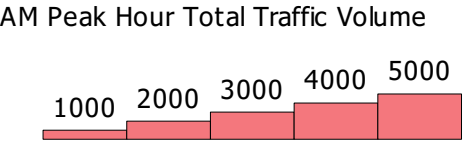
Version 1.01 - Assigned December 09, 2024

AM Peak Hour Total Traffic Volume  
Hazeldean Road @ Terry Fox Drive  
2022 Model

User Initials: AJ  
Plot Prepared: March 27, 2025  
EMME Scenario: 22002



Legend



The TRANS model is continuously refined & maintained, and all information is provided in good faith. However, model outputs are provided "as is", and no warranty or guarantee is provided as to the accuracy, reliability or reasonableness of the results. In using this data, you agree to accept any and all risks arising from any incorrect, incomplete, or misleading information.

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As general good practice, it is recommended that the user confirm the network coding within the area of interest, and compare base year forecasts against traffic count data to assess the extent to which the model may be over- or under-estimating the travel demand.



# TRANS Regional Model

Version 1.01 - Assigned December 09, 2024

**AM Peak Hour Total Traffic Volume**

**Hazeldean Road @ Roger Griffiths Avenue**

2046 Model

User Initials: AJ

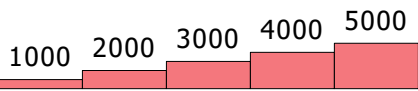
Plot Prepared: March 27, 2025

EMME Scenario: 46001

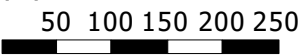


## Legend

AM Peak Hour Total Traffic Volume



Distance (m)



The TRANS model is continuously refined & maintained, and all information is provided in good faith. However, model outputs are provided "as is", and no warranty or guarantee is provided as to the accuracy, reliability or reasonableness of the results. In using this data, you agree to accept any and all risks arising from any incorrect, incomplete, or misleading information.

Recipients are required to use caution and professional judgement in using and interpreting model outputs. In particular, caution should be used when focusing on a geographically limited area (such as a single road or intersection), as the model is primarily designed to simulate regional-scale phenomena and has been calibrated at a regional level.

As general good practice, it is recommended that the user confirm the network coding within the area of interest, and compare base year forecasts against traffic count data to assess the extent to which the model may be over- or under-estimating the travel demand.

# TRANS Regional Model

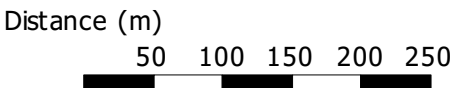
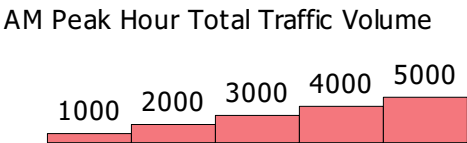
Version 1.01 - Assigned December 09, 2024

**AM Peak Hour Total Traffic Volume**  
**Hazeldean Road @ Terry Fox Drive**  
2046 Model

User Initials: AJ  
Plot Prepared: March 27, 2025  
EMME Scenario: 46001



## Legend



The TRANS model is continuously refined & maintained, and all information is provided in good faith. However, model outputs are provided "as is", and no warranty or guarantee is provided as to the accuracy, reliability or reasonableness of the results. In using this data, you agree to accept any and all risks arising from any incorrect, incomplete, or misleading information.

Recipients are required to use caution and professional judgement in using and interpreting model outputs. In particular, caution should be used when focusing on a geographically limited area (such as a single road or intersection), as the model is primarily designed to simulate regional-scale phenomena and has been calibrated at a regional level.

As general good practice, it is recommended that the user confirm the network coding within the area of interest, and compare base year forecasts against traffic count data to assess the extent to which the model may be over- or under-estimating the travel demand.

## **APPENDIX H**

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### Signal Timing Plans

# Traffic Signal Timing

City of Ottawa, Public Works Department

## Traffic Signal Operations Unit

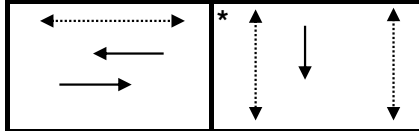
|                      |                        |                           |
|----------------------|------------------------|---------------------------|
| <b>Intersection:</b> | <i>Main:</i> Hazeldean | <i>Side:</i> Robert Grant |
| <b>Controller:</b>   | <b>MS 3200</b>         | <b>TSD: 6762</b>          |
| <b>Author:</b>       | Kymen Kwan             | <b>Date:</b> 26-Mar-2025  |

## Existing Timing Plans<sup>†</sup>

|               | Plan         |               |              |            |              | Ped Minimum Time |    |         |
|---------------|--------------|---------------|--------------|------------|--------------|------------------|----|---------|
|               | AM Peak<br>1 | Off Peak<br>2 | PM Peak<br>3 | Night<br>4 | Weekend<br>5 | Walk             | DW | A+R     |
| <b>Cycle</b>  | 115          | 100           | 120          | 100        | 110          |                  |    |         |
| <b>Offset</b> | 94           | 49            | 119          | X          | 11           |                  |    |         |
| EB Thru       | 79           | 64            | 84           | 64         | 74           | -                | -  | 3.7+2.4 |
| WB Thru       | 79           | 64            | 84           | 64         | 74           | 7                | 13 | 3.7+2.4 |
| SB Thru       | 36           | 36            | 36           | 36         | 36           | 7                | 22 | 3.3+2.8 |

## Phasing Sequence<sup>‡</sup>

Plan: All



**Notes:** 1) The WB U-Turn is prohibited

## Schedule

### Weekday

| Time  | Plan |
|-------|------|
| 0:10  | 4    |
| 6:30  | 1    |
| 9:30  | 2    |
| 15:00 | 3    |
| 19:00 | 2    |
| 23:00 | 4    |

### Saturday

| Time  | Plan |
|-------|------|
| 0:10  | 4    |
| 9:00  | 5    |
| 22:30 | 4    |

### Sunday

| Time  | Plan |
|-------|------|
| 0:10  | 4    |
| 8:00  | 5    |
| 22:30 | 4    |

## Notes

<sup>†</sup>: Time for each direction includes amber and all red intervals

<sup>‡</sup>: Start of first phase should be used as reference point for offset

Asterisk (\*) Indicates actuated phase

(fp): Fully Protected Left Turn

◀.....▶ Pedestrian signal

Cost is \$62.38 (\$55.20 + HST)

# Traffic Signal Timing

City of Ottawa, Public Works Department

## Traffic Signal Operations Unit

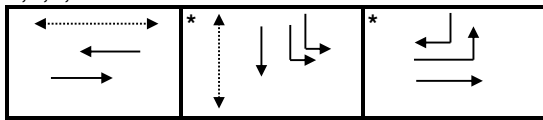
|                      |                        |                             |
|----------------------|------------------------|-----------------------------|
| <b>Intersection:</b> | <b>Main:</b> Hazeldean | <b>Side:</b> 635m E of Iber |
| <b>Controller:</b>   | <b>MS 3200</b>         | <b>TSD:</b> 6761            |
| <b>Author:</b>       | Kymen Kwan             | <b>Date:</b> 26-Mar-2025    |

## Existing Timing Plans†

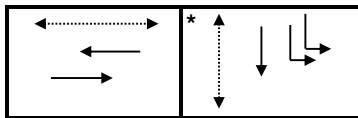
|               | Plan         |               |              |            |              | Ped Minimum Time |    |         |
|---------------|--------------|---------------|--------------|------------|--------------|------------------|----|---------|
|               | AM Peak<br>1 | Off Peak<br>2 | PM Peak<br>3 | Night<br>4 | Weekend<br>5 | Walk             | DW | A+R     |
| <b>Cycle</b>  | 115          | 100           | 120          | 80         | 110          |                  |    |         |
| <b>Offset</b> | 7            | 66            | 111          | X          | 103          |                  |    |         |
| EB Thru       | 82           | 66            | 87           | 47         | 76           | -                | -  | 3.7+2.6 |
| WB Thru       | 62           | 51            | 67           | 47         | 61           | 7                | 18 | 3.7+2.6 |
| SB Thru       | 33           | 34            | 33           | 33         | 34           | 7                | 18 | 3.3+2.9 |
| SB Left (fp)  | 33           | 34            | 33           | 33         | 34           | -                | -  | 3.3+2.9 |
| EB Left       | 20           | 15            | 20           | -          | 15           | -                | -  | 3.7+2.5 |
| SB Right      | 20           | 15            | 20           | -          | 15           | -                | -  | 3.7+2.5 |

## Phasing Sequence‡

Plan: 1, 2, 3, 5



Plan: 4



**Notes:** 1) The WB U-Turn is prohibited

## Schedule

| Weekday |      | Saturday |      | Sunday |      |
|---------|------|----------|------|--------|------|
| Time    | Plan | Time     | Plan | Time   | Plan |
| 0:10    | 4    | 0:10     | 4    | 0:10   | 4    |
| 6:30    | 1    | 9:00     | 5    | 8:00   | 5    |
| 9:30    | 2    | 22:30    | 4    | 22:30  | 4    |
| 15:00   | 3    |          |      |        |      |
| 19:00   | 2    |          |      |        |      |
| 23:00   | 4    |          |      |        |      |

## Notes

†: Time for each direction includes amber and all red intervals

‡: Start of first phase should be used as reference point for offset

Asterisk (\*) Indicates actuated phase

(fp): Fully Protected Left Turn

◄.....► Pedestrian signal

Cost is \$62.38 (\$55.20 + HST)

# Traffic Signal Timing

City of Ottawa, Public Works Department

## Traffic Signal Operations Unit

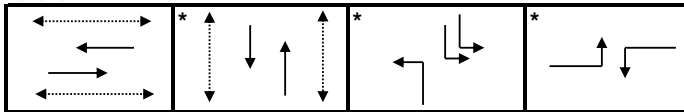
|                      |                        |                               |
|----------------------|------------------------|-------------------------------|
| <b>Intersection:</b> | <i>Main:</i> Hazeldean | <i>Side:</i> Mantra / Tillage |
| <b>Controller:</b>   | <b>ATC 3</b>           | <b>TSD: 6760</b>              |
| <b>Author:</b>       | Kymen Kwan             | <b>Date:</b> 26-Mar-2025      |

## Existing Timing Plans†

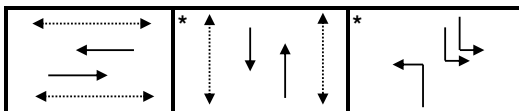
|               | Plan         |               |              |            |              | Ped Minimum Time |    |         |
|---------------|--------------|---------------|--------------|------------|--------------|------------------|----|---------|
|               | AM Peak<br>1 | Off Peak<br>2 | PM Peak<br>3 | Night<br>4 | Weekend<br>5 | Walk             | DW | A+R     |
| <b>Cycle</b>  | 115          | 100           | 120          | 90         | 110          |                  |    |         |
| <b>Offset</b> | 101          | 53            | 106          | X          | 86           |                  |    |         |
| EB Thru       | 43           | 33            | 43           | 35         | 38           | 7                | 18 | 3.7+2.6 |
| WB Thru       | 43           | 33            | 43           | 35         | 38           | 7                | 18 | 3.7+2.6 |
| NB Thru       | 32           | 32            | 32           | 31         | 32           | 7                | 18 | 3.3+3.2 |
| SB Thru       | 32           | 32            | 32           | 31         | 32           | 7                | 18 | 3.3+3.2 |
| NB Left (fp)  | 28           | 23            | 28           | 24         | 28           | -                | -  | 3.3+3.2 |
| SB Left (fp)  | 28           | 23            | 28           | 24         | 28           | -                | -  | 3.3+3.2 |
| EB Left       | 12           | 12            | 17           | -          | 12           | -                | -  | 3.7+2.4 |
| WB Left       | 12           | 12            | 17           | -          | 12           | -                | -  | 3.7+2.4 |

## Phasing Sequence\*

Plan: 1, 2, 3, 5



Plan: 4



**Notes:** 1) The WB U-Turn movement is prohibited

## Schedule

| Weekday |      | Saturday |      | Sunday |      |
|---------|------|----------|------|--------|------|
| Time    | Plan | Time     | Plan | Time   | Plan |
| 0:10    | 4    | 0:10     | 4    | 0:10   | 4    |
| 6:30    | 1    | 9:00     | 5    | 8:00   | 5    |
| 9:30    | 2    | 22:30    | 4    | 22:30  | 4    |
| 15:00   | 3    |          |      |        |      |
| 19:00   | 2    |          |      |        |      |
| 23:00   | 4    |          |      |        |      |

## Notes

†: Time for each direction includes amber and all red intervals  
‡: Start of first phase should be used as reference point for offset  
Asterisk (\*) Indicates actuated phase  
(fp): Fully Protected Left Turn  
◄.....► Pedestrian signal

Cost is \$62.38 (\$55.20 + HST)

# Traffic Signal Timing

City of Ottawa, Public Works Department

## Traffic Signal Operations Unit

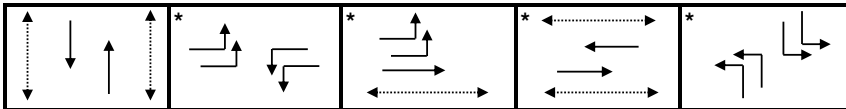
|                      |                        |                          |
|----------------------|------------------------|--------------------------|
| <b>Intersection:</b> | <i>Main:</i> Terry Fox | <i>Side:</i> Hazeldean   |
| <b>Controller:</b>   | ATC 3                  | <b>TSD:</b> 5698         |
| <b>Author:</b>       | Kymen Kwan             | <b>Date:</b> 27-Mar-2025 |

## Existing Timing Plans†

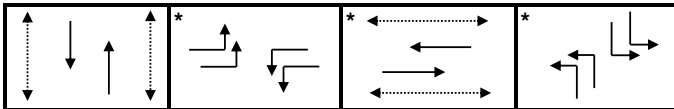
|               | Plan         |               |              |            | Ped Minimum Time |    |         |
|---------------|--------------|---------------|--------------|------------|------------------|----|---------|
|               | AM Peak<br>1 | Off Peak<br>2 | PM Peak<br>3 | Night<br>4 | Walk             | DW | A+R     |
| <b>Cycle</b>  | 110          | 110           | 120          | 115        |                  |    |         |
| <b>Offset</b> | 76           | 0             | 32           | 1          |                  |    |         |
| NB Thru       | 36           | 36            | 37           | 36         | 7                | 22 | 4.2+2.3 |
| SB Thru       | 36           | 36            | 37           | 36         | 7                | 22 | 4.2+2.3 |
| EB Left (fp)  | 21           | 22            | 23           | 22         | -                | -  | 3.7+2.8 |
| WB Left (fp)  | 14           | 22            | 23           | 22         | -                | -  | 3.7+2.8 |
| EB Thru       | 43           | 36            | 42           | 36         | 7                | 22 | 3.7+2.8 |
| WB Thru       | 36           | 36            | 42           | 36         | 7                | 21 | 3.7+2.8 |
| NB Left (fp)  | 17           | 16            | 18           | 21         | -                | -  | 4.2+2.3 |
| SB Left (fp)  | 17           | 16            | 18           | 21         | -                | -  | 4.2+2.3 |

## Phasing Sequence‡

Plan: 1



Plan: 2, 3, 4



**Notes:** 1) For Plan 3, there is a minimum recall of 10s green for the EW Thru movement

## Schedule

### Weekday

| Time  | Plan |
|-------|------|
| 0:10  | 4    |
| 6:30  | 1    |
| 9:30  | 2    |
| 15:00 | 3    |
| 19:00 | 2    |
| 23:00 | 4    |

### Saturday

| Time  | Plan |
|-------|------|
| 0:10  | 4    |
| 9:00  | 2    |
| 22:30 | 4    |

### Sunday

| Time  | Plan |
|-------|------|
| 0:10  | 4    |
| 8:00  | 2    |
| 22:30 | 4    |

## Notes

†: Time for each direction includes amber and all red intervals  
‡: Start of first phase should be used as reference point for offset  
Asterisk (\*) Indicates actuated phase  
(fp): Fully Protected Left Turn  
◀.....▶ Pedestrian signal

Cost is \$62.38 (\$55.20 + HST)



# Traffic Signal Timing

City of Ottawa, Public Works Department

## Traffic Signal Operations Unit

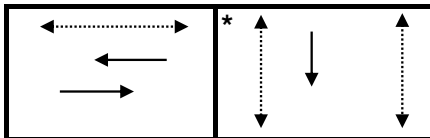
|                      |                        |                          |
|----------------------|------------------------|--------------------------|
| <b>Intersection:</b> | <b>Main:</b> Hazeldean | <b>Side:</b> Edgewater   |
| <b>Controller:</b>   | <b>ATC 3</b>           | <b>TSD:</b> 6680         |
| <b>Author:</b>       | Kymen Kwan             | <b>Date:</b> 27-Mar-2025 |

## Existing Timing Plans<sup>†</sup>

|               | Plan         |               |              |            | Ped Minimum Time |    |         |
|---------------|--------------|---------------|--------------|------------|------------------|----|---------|
|               | AM Peak<br>1 | Off Peak<br>2 | PM Peak<br>3 | Night<br>4 | Walk             | DW | A+R     |
| <b>Cycle</b>  | 110          | 110           | 120          | 70         |                  |    |         |
| <b>Offset</b> | 73           | 7             | 10           | X          |                  |    |         |
| EB Thru       | 76           | 76            | 86           | 36         | -                | -  | 3.7+2.5 |
| WB Thru       | 76           | 76            | 86           | 36         | 7                | 18 | 3.7+2.5 |
| SB Thru       | 34           | 34            | 34           | 34         | 7                | 21 | 3.3+2.8 |

## Phasing Sequence<sup>‡</sup>

Plan: All



## Schedule

### Weekday

| Time  | Plan |
|-------|------|
| 0:10  | 4    |
| 6:30  | 1    |
| 9:30  | 2    |
| 15:00 | 3    |
| 19:00 | 2    |
| 23:00 | 4    |

### Saturday

| Time  | Plan |
|-------|------|
| 0:10  | 4    |
| 9:00  | 2    |
| 22:30 | 4    |

### Sunday

| Time  | Plan |
|-------|------|
| 0:10  | 4    |
| 8:00  | 2    |
| 22:30 | 4    |

## Notes

†: Time for each direction includes amber and all red intervals

‡: Start of first phase should be used as reference point for offset

Asterisk (\*) Indicates actuated phase

(fp): Fully Protected Left Turn

←.....→ Pedestrian signal

Cost is \$62.38 (\$55.20 + HST)

# Traffic Signal Timing

City of Ottawa, Public Works Department

## Traffic Signal Operations Unit

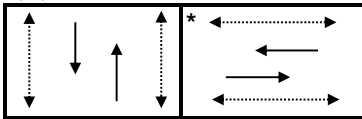
|                      |                        |                                         |
|----------------------|------------------------|-----------------------------------------|
| <b>Intersection:</b> | <i>Main:</i> Terry Fox | <i>Side:</i> Charlie Rogers / Edgewater |
| <b>Controller:</b>   | <b>ATC 3</b>           | <b>TSD: 6248</b>                        |
| <b>Author:</b>       | Kymen Kwan             | <b>Date:</b> 31-Mar-2025                |

## Existing Timing Plans†

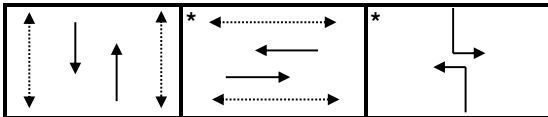
|               | Plan         |               |              |            | Ped Minimum Time |    |         |
|---------------|--------------|---------------|--------------|------------|------------------|----|---------|
|               | AM Peak<br>1 | Off Peak<br>2 | PM Peak<br>3 | Night<br>4 | Walk             | DW | A+R     |
| <b>Cycle</b>  | 110          | 100           | 120          | 75         |                  |    |         |
| <b>Offset</b> | 16           | 25            | 46           | X          |                  |    |         |
| NB Thru       | 73           | 63            | 69           | 38         | 7                | 21 | 4.2+2.3 |
| SB Thru       | 73           | 63            | 69           | 38         | 7                | 21 | 4.2+2.3 |
| EB Thru       | 37           | 37            | 37           | 37         | 7                | 23 | 3.3+3.2 |
| WB Thru       | 37           | 37            | 37           | 37         | 7                | 23 | 3.3+3.2 |
| NB Left       | -            | -             | 14           | -          | -                | -  | 4.2+2.4 |
| SB Left       | -            | -             | 14           | -          | -                | -  | 4.2+2.4 |

## Phasing Sequence‡

Plan: 1, 2, 4



Plan: 3



## Schedule

### Weekday

| Time  | Plan |
|-------|------|
| 0:10  | 4    |
| 6:30  | 1    |
| 9:30  | 2    |
| 15:00 | 3    |
| 19:00 | 2    |
| 23:00 | 4    |

### Saturday

| Time  | Plan |
|-------|------|
| 0:10  | 4    |
| 9:00  | 2    |
| 22:00 | 4    |

### Sunday

| Time  | Plan |
|-------|------|
| 0:10  | 4    |
| 8:00  | 2    |
| 22:30 | 4    |

## Notes

†: Time for each direction includes amber and all red intervals

‡: Start of first phase should be used as reference point for offset

Asterisk (\*) Indicates actuated phase

(fp): Fully Protected Left Turn

◀.....▶ Pedestrian signal

Cost is \$62.38 (\$55.20 + HST)

# Traffic Signal Timing

City of Ottawa, Public Works Department

## Traffic Signal Operations Unit

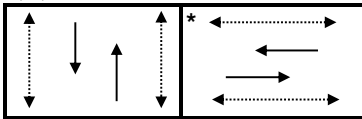
**Intersection:** *Main:* Terry Fox *Side:* 240m S of Edgewater / Charlie Rogers  
**Controller:** MS 3200 **TSD:** 6341  
**Author:** Kymen Kwan **Date:** 31-Mar-2025

## Existing Timing Plans†

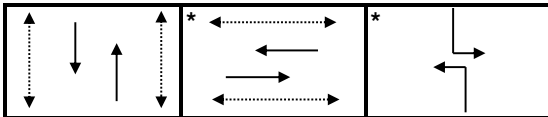
|               | Plan         |               |              |            | Ped Minimum Time |    |         |
|---------------|--------------|---------------|--------------|------------|------------------|----|---------|
|               | AM Peak<br>1 | Off Peak<br>2 | PM Peak<br>3 | Night<br>4 | Walk             | DW | A+R     |
| <b>Cycle</b>  | 110          | 100           | 120          | 95         |                  |    |         |
| <b>Offset</b> | 26           | 60            | 40           | X          |                  |    |         |
| NB Thru       | 77           | 67            | 72           | 62         | 7                | 19 | 4.2+2.3 |
| SB Thru       | 77           | 67            | 72           | 62         | 7                | 19 | 4.2+2.3 |
| EB Thru       | 33           | 33            | 33           | 33         | 7                | 19 | 3.3+2.9 |
| WB Thru       | 33           | 33            | 33           | 33         | 7                | 19 | 3.3+2.9 |
| NB Left       | -            | -             | 15           | -          | -                | -  | 4.2+2.3 |
| SB Left       | -            | -             | 15           | -          | -                | -  | 4.2+2.3 |

## Phasing Sequence‡

Plan: 1, 2, 4



Plan: 3



## Schedule

| Weekday |      | Saturday |      | Sunday |      |
|---------|------|----------|------|--------|------|
| Time    | Plan | Time     | Plan | Time   | Plan |
| 0:10    | 4    | 0:10     | 4    | 0:10   | 4    |
| 6:30    | 1    | 9:00     | 2    | 8:00   | 2    |
| 9:30    | 2    | 22:30    | 4    | 22:30  | 4    |
| 15:00   | 3    |          |      |        |      |
| 19:00   | 2    |          |      |        |      |
| 23:00   | 4    |          |      |        |      |

## Notes

†: Time for each direction includes amber and all red intervals  
‡: Start of first phase should be used as reference point for offset  
Asterisk (\*) Indicates actuated phase  
(fp): Fully Protected Left Turn  
◄.....► Pedestrian signal

Cost is \$62.38 (\$55.20 + HST)

# Traffic Signal Timing

City of Ottawa, Public Works Department

## Traffic Signal Operations Unit

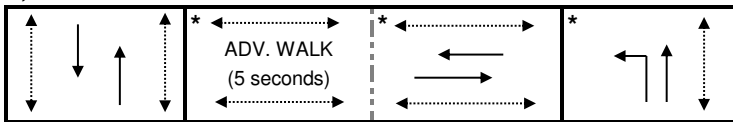
|                      |                        |                                  |
|----------------------|------------------------|----------------------------------|
| <b>Intersection:</b> | <i>Main:</i> Terry Fox | <i>Side:</i> 130m S of Hazeldean |
| <b>Controller:</b>   | <b>ATC 3</b>           | <b>TSD: 6590</b>                 |
| <b>Author:</b>       | Kymen Kwan             | <b>Date:</b> 31-Mar-2025         |

## Existing Timing Plans†

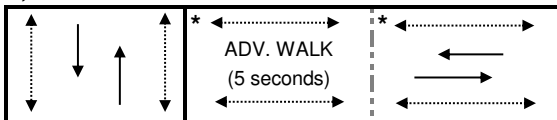
|               | Plan         |               |              |            | Ped Minimum Time |    |         |
|---------------|--------------|---------------|--------------|------------|------------------|----|---------|
|               | AM Peak<br>1 | Off Peak<br>2 | PM Peak<br>3 | Night<br>4 | Walk             | DW | A+R     |
| <b>Cycle</b>  | 110          | 110           | 120          | 65         |                  |    |         |
| <b>Offset</b> | 80           | 18            | 22           | X          |                  |    |         |
| NB Thru       | 72           | 74            | 84           | 29         | 7                | 13 | 4.2+1.8 |
| SB Thru       | 57           | 62            | 84           | 29         | 7                | 13 | 4.2+1.8 |
| EB Thru       | 38           | 36            | 36           | 36         | 7                | 22 | 3.0+4.0 |
| WB Thru       | 38           | 36            | 36           | 36         | 7                | 22 | 3.0+4.0 |
| NB Left       | 15           | 12            | -            | -          | -                | -  | 4.2+1.8 |

## Phasing Sequence‡

Plan: 1, 2



Plan: 3, 4



## Schedule

| Weekday |      | Saturday |      | Sunday |      |
|---------|------|----------|------|--------|------|
| Time    | Plan | Time     | Plan | Time   | Plan |
| 0:10    | 4    | 0:10     | 4    | 0:10   | 4    |
| 6:30    | 1    | 9:00     | 2    | 8:00   | 2    |
| 9:30    | 2    | 22:30    | 4    | 22:30  | 4    |
| 15:00   | 3    |          |      |        |      |
| 19:00   | 2    |          |      |        |      |
| 23:00   | 4    |          |      |        |      |

## Notes

†: Time for each direction includes amber and all red intervals  
‡: Start of first phase should be used as reference point for offset  
Asterisk (\*) Indicates actuated phase  
(fp): Fully Protected Left Turn  
◀.....▶ Pedestrian signal

Cost is \$62.38 (\$55.20 + HST)

# Traffic Signal Timing

City of Ottawa, Public Works Department

## Traffic Signal Operations Unit

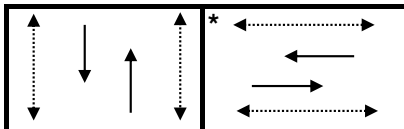
|                      |                        |                                   |
|----------------------|------------------------|-----------------------------------|
| <b>Intersection:</b> | <b>Main:</b> Terry Fox | <b>Side:</b> Winchester / Halkirk |
| <b>Controller:</b>   | <b>ATC 3</b>           | <b>TSD:</b> 6554                  |
| <b>Author:</b>       | Kymen Kwan             | <b>Date:</b> 31-Mar-2025          |

## Existing Timing Plans†

|               | Plan         |               |              |            | Ped Minimum Time |    |         |
|---------------|--------------|---------------|--------------|------------|------------------|----|---------|
|               | AM Peak<br>1 | Off Peak<br>2 | PM Peak<br>3 | Night<br>4 | Walk             | DW | A+R     |
| <b>Cycle</b>  | 110          | 110           | 120          | 70         |                  |    |         |
| <b>Offset</b> | 40           | 92            | 115          | X          |                  |    |         |
| NB Thru       | 72           | 72            | 82           | 33         | 7                | 15 | 4.2+2.1 |
| SB Thru       | 72           | 72            | 82           | 33         | 7                | 15 | 4.2+2.1 |
| EB Thru       | 38           | 38            | 38           | 37         | 7                | 23 | 3.3+2.7 |
| WB Thru       | 38           | 38            | 38           | 37         | 7                | 23 | 3.3+2.7 |

## Phasing Sequence‡

Plan: All



**Notes:** 1) If the WB Pedestrian phase is not actuated, the WB Thru movement will force off after 15s

## Schedule

| Weekday |      | Saturday |      | Sunday |      |
|---------|------|----------|------|--------|------|
| Time    | Plan | Time     | Plan | Time   | Plan |
| 0:10    | 4    | 0:10     | 4    | 0:10   | 4    |
| 6:30    | 1    | 9:00     | 2    | 8:00   | 2    |
| 9:30    | 2    | 22:30    | 4    | 22:30  | 4    |
| 15:00   | 3    |          |      |        |      |
| 19:00   | 2    |          |      |        |      |
| 23:00   | 4    |          |      |        |      |

## Notes

†: Time for each direction includes amber and all red intervals  
‡: Start of first phase should be used as reference point for offset  
Asterisk (\*) Indicates actuated phase  
(fp): Fully Protected Left Turn  
◀.....▶ Pedestrian signal

Cost is \$62.38 (\$55.20 + HST)

## **APPENDIX I**

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### Existing Synchro Analysis



| Lane Group                 | EBU   | EBL   | EBT   | WBU   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       | ↰     | ↰↰    |       | ↰↰    | ↰     | ↰     | ↰     |
| Traffic Volume (vph)       | 3     | 10    | 860   | 1     | 576   | 36    | 16    | 1     |
| Future Volume (vph)        | 3     | 10    | 860   | 1     | 576   | 36    | 16    | 1     |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 50.0  |       | 0.0   |       | 175.0 | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       | 0     |       | 1     | 1     | 1     |
| Taper Length (m)           |       | 65.0  |       | 10.0  |       |       | 20.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  | 1.00  |
| Ped Bike Factor            |       |       |       |       |       |       |       | 0.99  |
| Frt                        |       |       |       |       |       | 0.850 |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1768  | 3402  | 0     | 3370  | 1551  | 1768  | 1582  |
| Flt Permitted              |       | 0.408 |       |       | 0.954 |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 759   | 3402  | 0     | 3215  | 1551  | 1768  | 1561  |
| Right Turn on Red          |       |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       |       |       | 40    |       | 1     |
| Link Speed (k/h)           |       |       | 60    |       | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 568.4 |       | 297.5 |       | 251.2 |       |
| Travel Time (s)            |       |       | 34.1  |       | 17.9  |       | 18.1  |       |
| Confl. Peds. (#/hr)        |       |       |       |       |       |       |       | 1     |
| Peak Hour Factor           | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  |
| Heavy Vehicles (%)         | 1%    | 1%    | 5%    | 1%    | 6%    | 3%    | 1%    | 1%    |
| Adj. Flow (vph)            | 3     | 11    | 956   | 1     | 640   | 40    | 18    | 1     |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 14    | 956   | 0     | 641   | 40    | 18    | 1     |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | Left  | Left  | R NA  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 6.0   |       | 4.0   |       | 6.0   |       |
| Link Offset(m)             |       |       | 0.0   |       | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   |       | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       | 14    |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 1     | 2     | 1     | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Left  | Thru  | Right | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 2.0   | 10.0  | 2.0   | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 2.0   | 0.6   | 2.0   | 2.0   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex | CI+Ex | CI+Ex | CI+Ex | CI+Ex | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   |       | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   |       | 0.6   |       |       |       |
| Detector 2 Type            |       |       | CI+Ex |       | CI+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   |       | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | Perm  | NA    | Perm  | Perm  | Perm  |
| Protected Phases           |       |       | 2     |       | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       | 6     |       | 6     | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     | 6     | 6     | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |       |





| Lane Group              | EBU   | EBL   | EBT   | WBU   | WBT   | WBR   | SBL   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       | 16.1  | 16.1  | 16.1  | 26.1  | 26.1  | 26.1  | 35.1  | 35.1  |
| Total Split (s)         | 79.0  | 79.0  | 79.0  | 79.0  | 79.0  | 79.0  | 36.0  | 36.0  |
| Total Split (%)         | 68.7% | 68.7% | 68.7% | 68.7% | 68.7% | 68.7% | 31.3% | 31.3% |
| Maximum Green (s)       | 72.9  | 72.9  | 72.9  | 72.9  | 72.9  | 72.9  | 29.9  | 29.9  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.3   | 3.3   |
| All-Red Time (s)        | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.1   | 6.1   |       | 6.1   | 6.1   | 6.1   | 6.1   |
| Lead/Lag                |       |       |       |       |       |       |       |       |
| Lead-Lag Optimize?      |       |       |       |       |       |       |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max | C-Max | C-Max | C-Max | C-Max | None  | None  |
| Walk Time (s)           |       |       |       | 7.0   | 7.0   | 7.0   | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |       |       | 13.0  | 13.0  | 13.0  | 22.0  | 22.0  |
| Pedestrian Calls (#/hr) |       |       |       | 1     | 1     | 1     | 1     | 1     |
| Act Effct Green (s)     |       | 102.3 | 102.3 |       | 102.3 | 102.3 | 13.8  | 13.8  |
| Actuated g/C Ratio      |       | 0.89  | 0.89  |       | 0.89  | 0.89  | 0.12  | 0.12  |
| v/c Ratio               |       | 0.02  | 0.32  |       | 0.22  | 0.03  | 0.09  | 0.01  |
| Control Delay           |       | 4.5   | 3.7   |       | 1.3   | 0.2   | 42.1  | 29.0  |
| Queue Delay             |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             |       | 4.5   | 3.7   |       | 1.3   | 0.2   | 42.1  | 29.0  |
| LOS                     |       | A     | A     |       | A     | A     | D     | C     |
| Approach Delay          |       |       | 3.7   |       | 1.3   |       | 41.4  |       |
| Approach LOS            |       |       | A     |       | A     |       | D     |       |
| Queue Length 50th (m)   |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 3.5   | 0.0   |
| Queue Length 95th (m)   |       | 3.1   | 59.9  |       | 10.2  | 0.0   | 8.2   | 1.3   |
| Internal Link Dist (m)  |       |       | 544.4 |       | 273.5 |       | 227.2 |       |
| Turn Bay Length (m)     |       | 50.0  |       |       |       | 175.0 | 30.0  |       |
| Base Capacity (vph)     |       | 675   | 3027  |       | 2860  | 1384  | 459   | 406   |
| Starvation Cap Reductn  |       | 0     | 0     |       | 0     | 0     | 0     | 0     |
| Spillback Cap Reductn   |       | 0     | 0     |       | 0     | 0     | 0     | 0     |
| Storage Cap Reductn     |       | 0     | 0     |       | 0     | 0     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.02  | 0.32  |       | 0.22  | 0.03  | 0.04  | 0.00  |

#### Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 94 (82%), Referenced to phase 2:EBTL and 6:WBTU, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.32

Intersection Signal Delay: 3.2

Intersection LOS: A

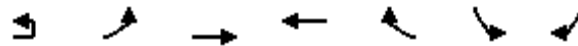
Intersection Capacity Utilization 44.1%

ICU Level of Service A

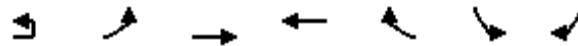
Analysis Period (min) 15

Splits and Phases: 1: Hazeldean & 325 E of Iber





| Lane Group                 | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       | ↰     | ↰↰    | ↰↰    | ↰     | ↰↰    | ↰     |
| Traffic Volume (vph)       | 1     | 107   | 689   | 629   | 47    | 28    | 17    |
| Future Volume (vph)        | 1     | 107   | 689   | 629   | 47    | 28    | 17    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 75.0  |       |       | 180.0 | 40.0  | 40.0  |
| Storage Lanes              |       | 1     |       |       | 1     | 2     | 0     |
| Taper Length (m)           |       | 75.0  |       |       |       | 30.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 1.00  | 0.97  | 1.00  |
| Ped Bike Factor            |       | 1.00  |       |       | 0.98  |       | 0.99  |
| Frt                        |       |       |       |       | 0.850 |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1768  | 3435  | 3402  | 1567  | 3431  | 1582  |
| Flt Permitted              |       | 0.346 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 643   | 3435  | 3402  | 1528  | 3431  | 1561  |
| Right Turn on Red          |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       |       | 52    |       | 19    |
| Link Speed (k/h)           |       |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 297.5 | 287.2 |       | 237.4 |       |
| Travel Time (s)            |       |       | 17.9  | 17.2  |       | 17.1  |       |
| Confl. Peds. (#/hr)        |       | 2     |       |       | 2     |       | 1     |
| Peak Hour Factor           | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  |
| Heavy Vehicles (%)         | 1%    | 1%    | 4%    | 5%    | 2%    | 1%    | 1%    |
| Adj. Flow (vph)            | 1     | 119   | 766   | 699   | 52    | 31    | 19    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 120   | 766   | 699   | 52    | 31    | 19    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | Left  | Left  | Left  | Right | Left  | R NA  |
| Median Width(m)            |       |       | 6.0   | 4.0   |       | 10.0  |       |
| Link Offset(m)             |       |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 2     | 1     | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Thru  | Right | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 10.0  | 2.0   | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 0.6   | 2.0   | 2.0   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex | CI+Ex | CI+Ex | CI+Ex | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       |       | CI+Ex | CI+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | pm+pt | pm+pt | NA    | NA    | Perm  | Prot  | pm+ov |
| Protected Phases           | 5!    | 5     | 2     | 6     |       | 4     | 5!    |
| Permitted Phases           | 2!    | 2     |       |       | 6     |       | 4     |
| Detector Phase             | 5     | 5     | 2     | 6     | 6     | 4     | 5     |
| Switch Phase               |       |       |       |       |       |       |       |



| Lane Group              | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|
| Minimum Initial (s)     | 5.0   | 5.0   | 10.0  | 10.0  | 10.0  | 10.0  | 5.0   |
| Minimum Split (s)       | 11.2  | 11.2  | 16.3  | 31.3  | 31.3  | 31.2  | 11.2  |
| Total Split (s)         | 20.0  | 20.0  | 82.0  | 62.0  | 62.0  | 33.0  | 20.0  |
| Total Split (%)         | 17.4% | 17.4% | 71.3% | 53.9% | 53.9% | 28.7% | 17.4% |
| Maximum Green (s)       | 13.8  | 13.8  | 75.7  | 55.7  | 55.7  | 26.8  | 13.8  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.3   | 3.7   |
| All-Red Time (s)        | 2.5   | 2.5   | 2.6   | 2.6   | 2.6   | 2.9   | 2.5   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.2   | 6.3   | 6.3   | 6.3   | 6.2   | 6.2   |
| Lead/Lag                | Lead  | Lead  |       | Lag   | Lag   |       | Lead  |
| Lead-Lag Optimize?      |       |       |       |       |       |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  | C-Max | C-Max | C-Max | None  | None  |
| Walk Time (s)           |       |       |       | 7.0   | 7.0   | 7.0   |       |
| Flash Dont Walk (s)     |       |       |       | 18.0  | 18.0  | 18.0  |       |
| Pedestrian Calls (#/hr) |       |       |       | 2     | 2     | 1     |       |
| Act Effct Green (s)     |       | 96.1  | 98.5  | 82.6  | 82.6  | 13.0  | 16.2  |
| Actuated g/C Ratio      |       | 0.84  | 0.86  | 0.72  | 0.72  | 0.11  | 0.14  |
| v/c Ratio               |       | 0.20  | 0.26  | 0.29  | 0.05  | 0.08  | 0.08  |
| Control Delay           |       | 2.4   | 1.8   | 5.7   | 1.1   | 43.4  | 12.1  |
| Queue Delay             |       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             |       | 2.4   | 1.8   | 5.7   | 1.1   | 43.4  | 12.1  |
| LOS                     |       | A     | A     | A     | A     | D     | B     |
| Approach Delay          |       |       | 1.8   | 5.3   |       | 31.5  |       |
| Approach LOS            |       |       | A     | A     |       | C     |       |
| Queue Length 50th (m)   |       | 4.6   | 18.4  | 45.2  | 1.2   | 3.0   | 0.0   |
| Queue Length 95th (m)   |       | 3.4   | 8.4   | 76.3  | 1.0   | 6.3   | 4.6   |
| Internal Link Dist (m)  |       |       | 273.5 | 263.2 |       | 213.4 |       |
| Turn Bay Length (m)     |       | 75.0  |       |       | 180.0 | 40.0  | 40.0  |
| Base Capacity (vph)     |       | 672   | 2942  | 2443  | 1112  | 799   | 327   |
| Starvation Cap Reductn  |       | 0     | 0     | 0     | 0     | 0     | 0     |
| Spillback Cap Reductn   |       | 0     | 0     | 0     | 0     | 0     | 0     |
| Storage Cap Reductn     |       | 0     | 0     | 0     | 0     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.18  | 0.26  | 0.29  | 0.05  | 0.04  | 0.06  |

#### Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 7 (6%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.29

Intersection Signal Delay: 4.3

Intersection LOS: A

Intersection Capacity Utilization 51.5%

ICU Level of Service A

Analysis Period (min) 15

! Phase conflict between lane groups.

Splits and Phases: 2: Hazeldean & Roger Griffiths



3: Mantra/Tillage & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2025 Existing Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |  |
| Traffic Volume (vph)       | 45                                                                                | 633                                                                               | 12                                                                                | 22                                                                                | 574                                                                               | 113                                                                               | 9                                                                                  | 0                                                                                   | 34                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Future Volume (vph)        | 45                                                                                | 633                                                                               | 12                                                                                | 22                                                                                | 574                                                                               | 113                                                                               | 9                                                                                  | 0                                                                                   | 34                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 80.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 105.0                                                                             | 55.0                                                                               |                                                                                     | 0.0                                                                                 | 35.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 2                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)           | 60.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                               |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 0.97                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.97                                                                              |                                                                                    | 0.98                                                                                |                                                                                     | 0.99                                                                                |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.857                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 3450                                                                              | 0                                                                                 | 1768                                                                              | 3537                                                                              | 1551                                                                              | 1768                                                                               | 1522                                                                                | 0                                                                                   | 3332                                                                                | 1595                                                                                | 0                                                                                   |
| Flt Permitted              | 0.367                                                                             |                                                                                   |                                                                                   | 0.351                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 681                                                                               | 3450                                                                              | 0                                                                                 | 653                                                                               | 3537                                                                              | 1506                                                                              | 1768                                                                               | 1522                                                                                | 0                                                                                   | 3295                                                                                | 1595                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   | 153                                                                               |                                                                                    | 342                                                                                 |                                                                                     |                                                                                     | 40                                                                                  |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                    | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                    | 289.2                                                                               |                                                                                     |                                                                                     | 233.8                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                    | 20.8                                                                                |                                                                                     |                                                                                     | 16.8                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 4                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                    |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                               | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 16%                                                                               | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                 | 1%                                                                                  | 3%                                                                                  | 4%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 50                                                                                | 703                                                                               | 13                                                                                | 24                                                                                | 638                                                                               | 126                                                                               | 10                                                                                 | 0                                                                                   | 38                                                                                  | 82                                                                                  | 2                                                                                   | 40                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 50                                                                                | 716                                                                               | 0                                                                                 | 24                                                                                | 638                                                                               | 126                                                                               | 10                                                                                 | 38                                                                                  | 0                                                                                   | 82                                                                                  | 42                                                                                  | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | R NA                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |                                                                                     |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                | Perm                                                                              | Prot                                                                               | NA                                                                                  |                                                                                     | Prot                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 3                                                                                  | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector Phase             | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 | 6                                                                                 | 3                                                                                  | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

3: Mantra/Tillage & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2025 Existing Traffic

| Lane Group              | EBL   | EBT   | EBR | WBL   | WBT   | WBR   | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-------------------------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Minimum Initial (s)     | 5.0   | 10.0  |     | 5.0   | 10.0  | 10.0  | 5.0   | 10.0  |     | 5.0   | 10.0  |     |
| Minimum Split (s)       | 11.1  | 31.3  |     | 11.1  | 31.3  | 31.3  | 11.5  | 31.5  |     | 11.5  | 31.5  |     |
| Total Split (s)         | 12.0  | 43.0  |     | 12.0  | 43.0  | 43.0  | 28.0  | 32.0  |     | 28.0  | 32.0  |     |
| Total Split (%)         | 10.4% | 37.4% |     | 10.4% | 37.4% | 37.4% | 24.3% | 27.8% |     | 24.3% | 27.8% |     |
| Maximum Green (s)       | 5.9   | 36.7  |     | 5.9   | 36.7  | 36.7  | 21.5  | 25.5  |     | 21.5  | 25.5  |     |
| Yellow Time (s)         | 3.7   | 3.7   |     | 3.7   | 3.7   | 3.7   | 3.3   | 3.3   |     | 3.3   | 3.3   |     |
| All-Red Time (s)        | 2.4   | 2.6   |     | 2.4   | 2.6   | 2.6   | 3.2   | 3.2   |     | 3.2   | 3.2   |     |
| Lost Time Adjust (s)    | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)     | 6.1   | 6.3   |     | 6.1   | 6.3   | 6.3   | 6.5   | 6.5   |     | 6.5   | 6.5   |     |
| Lead/Lag                | Lead  | Lag   |     | Lead  | Lag   | Lag   | Lag   | Lead  |     | Lag   | Lead  |     |
| Lead-Lag Optimize?      |       |       |     |       |       |       |       |       |     |       |       |     |
| Vehicle Extension (s)   | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode             | None  | C-Max |     | None  | C-Max | C-Max | None  | None  |     | None  | None  |     |
| Walk Time (s)           |       | 7.0   |     |       | 7.0   | 7.0   |       | 7.0   |     |       | 7.0   |     |
| Flash Dont Walk (s)     |       | 18.0  |     |       | 18.0  | 18.0  |       | 18.0  |     |       | 18.0  |     |
| Pedestrian Calls (#/hr) |       | 1     |     |       | 4     | 4     |       | 5     |     |       | 1     |     |
| Act Effct Green (s)     | 80.1  | 76.7  |     | 77.8  | 73.8  | 73.8  | 6.8   | 13.0  |     | 8.7   | 19.1  |     |
| Actuated g/C Ratio      | 0.70  | 0.67  |     | 0.68  | 0.64  | 0.64  | 0.06  | 0.11  |     | 0.08  | 0.17  |     |
| v/c Ratio               | 0.09  | 0.31  |     | 0.05  | 0.28  | 0.12  | 0.10  | 0.08  |     | 0.32  | 0.14  |     |
| Control Delay           | 12.9  | 15.8  |     | 9.6   | 14.3  | 2.2   | 51.8  | 0.3   |     | 53.5  | 12.9  |     |
| Queue Delay             | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay             | 12.9  | 15.8  |     | 9.6   | 14.3  | 2.2   | 51.8  | 0.3   |     | 53.5  | 12.9  |     |
| LOS                     | B     | B     |     | A     | B     | A     | D     | A     |     | D     | B     |     |
| Approach Delay          |       | 15.7  |     |       | 12.2  |       |       | 11.0  |     |       | 39.7  |     |
| Approach LOS            |       | B     |     |       | B     |       |       | B     |     |       | D     |     |
| Queue Length 50th (m)   | 3.0   | 37.3  |     | 1.5   | 35.1  | 0.0   | 2.0   | 0.0   |     | 8.5   | 0.3   |     |
| Queue Length 95th (m)   | 14.4  | 70.6  |     | 6.1   | 65.4  | 6.8   | 6.9   | 0.0   |     | 15.4  | 8.8   |     |
| Internal Link Dist (m)  |       | 263.2 |     |       | 771.2 |       |       | 265.2 |     |       | 209.8 |     |
| Turn Bay Length (m)     | 80.0  |       |     | 70.0  |       | 105.0 | 55.0  |       |     | 35.0  |       |     |
| Base Capacity (vph)     | 538   | 2302  |     | 502   | 2270  | 1021  | 330   | 603   |     | 622   | 384   |     |
| Starvation Cap Reductn  | 0     | 0     |     | 0     | 0     | 0     | 0     | 0     |     | 0     | 0     |     |
| Spillback Cap Reductn   | 0     | 0     |     | 0     | 0     | 0     | 0     | 0     |     | 0     | 0     |     |
| Storage Cap Reductn     | 0     | 0     |     | 0     | 0     | 0     | 0     | 0     |     | 0     | 0     |     |
| Reduced v/c Ratio       | 0.09  | 0.31  |     | 0.05  | 0.28  | 0.12  | 0.03  | 0.06  |     | 0.13  | 0.11  |     |

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 101 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.32

Intersection Signal Delay: 15.7

Intersection LOS: B

Intersection Capacity Utilization 51.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: Mantra/Tillage & Hazeldean

|      |      |      |
|------|------|------|
|      |      |      |
| 12 s | 43 s | 32 s |
|      |      |      |
| 12 s | 43 s | 28 s |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2025 Existing Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 233                                                                               | 530                                                                               | 163                                                                               | 5                                                                                 | 120                                                                               | 288                                                                                | 173                                                                                 | 170                                                                                 | 735                                                                                 | 248                                                                                 | 171                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 233                                                                               | 530                                                                               | 163                                                                               | 5                                                                                 | 120                                                                               | 288                                                                                | 173                                                                                 | 170                                                                                 | 735                                                                                 | 248                                                                                 | 171                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     | 75.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.98                                                                              |                                                                                   | 1.00                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3214                                                                              | 3468                                                                              | 1508                                                                              | 0                                                                                 | 3398                                                                              | 3435                                                                               | 1537                                                                                | 3300                                                                                | 3468                                                                                | 1567                                                                                | 3179                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3205                                                                              | 3468                                                                              | 1482                                                                              | 0                                                                                 | 3393                                                                              | 3435                                                                               | 1506                                                                                | 3287                                                                                | 3468                                                                                | 1541                                                                                | 3173                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 181                                                                               |                                                                                   |                                                                                   |                                                                                    | 228                                                                                 |                                                                                     |                                                                                     | 228                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 4                                                                                 |                                                                                   | 3                                                                                 |                                                                                   | 3                                                                                 |                                                                                    | 4                                                                                   | 4                                                                                   |                                                                                     | 3                                                                                   | 3                                                                                   |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                    | 4                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                               | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 8%                                                                                | 3%                                                                                | 6%                                                                                | 1%                                                                                | 2%                                                                                | 4%                                                                                 | 4%                                                                                  | 5%                                                                                  | 3%                                                                                  | 2%                                                                                  | 9%                                                                                  |
| Adj. Flow (vph)            | 8                                                                                 | 259                                                                               | 589                                                                               | 181                                                                               | 6                                                                                 | 133                                                                               | 320                                                                                | 192                                                                                 | 189                                                                                 | 817                                                                                 | 276                                                                                 | 190                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 267                                                                               | 589                                                                               | 181                                                                               | 0                                                                                 | 139                                                                               | 320                                                                                | 192                                                                                 | 189                                                                                 | 817                                                                                 | 276                                                                                 | 190                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2025 Existing Traffic

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 409   | 297   |
| Future Volume (vph)        | 409   | 297   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 200.0 |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3402  | 1508  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3402  | 1483  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 310   |
| Link Speed (k/h)           | 70    |       |
| Link Distance (m)          | 316.2 |       |
| Travel Time (s)            | 16.3  |       |
| Confl. Peds. (#/hr)        |       | 4     |
| Confl. Bikes (#/hr)        |       |       |
| Peak Hour Factor           | 0.90  | 0.90  |
| Heavy Vehicles (%)         | 5%    | 6%    |
| Adj. Flow (vph)            | 454   | 330   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 454   | 330   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | Right |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 6     |       |
| Permitted Phases           |       | 6     |
| Detector Phase             | 6     | 6     |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2025 Existing Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                                | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 21.0                                                                              | 21.0                                                                              | 43.0                                                                              | 43.0                                                                              | 14.0                                                                              | 14.0                                                                              | 36.0                                                                                | 36.0                                                                                | 17.0                                                                                | 36.0                                                                                | 36.0                                                                                | 17.0                                                                                |
| Total Split (%)         | 19.1%                                                                             | 19.1%                                                                             | 39.1%                                                                             | 39.1%                                                                             | 12.7%                                                                             | 12.7%                                                                             | 32.7%                                                                               | 32.7%                                                                               | 15.5%                                                                               | 32.7%                                                                               | 32.7%                                                                               | 15.5%                                                                               |
| Maximum Green (s)       | 14.5                                                                              | 14.5                                                                              | 36.5                                                                              | 36.5                                                                              | 7.5                                                                               | 7.5                                                                               | 29.5                                                                                | 29.5                                                                                | 10.5                                                                                | 29.5                                                                                | 29.5                                                                                | 10.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                 | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                                | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                                | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 3                                                                                 | 3                                                                                 |                                                                                   |                                                                                   | 4                                                                                   | 4                                                                                   |                                                                                     | 3                                                                                   | 3                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 13.3                                                                              | 25.5                                                                              | 25.5                                                                              |                                                                                   | 7.4                                                                               | 19.6                                                                                | 19.6                                                                                | 11.0                                                                                | 39.9                                                                                | 39.9                                                                                | 11.2                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              | 0.23                                                                              | 0.23                                                                              |                                                                                   | 0.07                                                                              | 0.18                                                                                | 0.18                                                                                | 0.10                                                                                | 0.36                                                                                | 0.36                                                                                | 0.10                                                                                |
| v/c Ratio               |                                                                                   | 0.69                                                                              | 0.73                                                                              | 0.38                                                                              |                                                                                   | 0.61                                                                              | 0.52                                                                                | 0.42                                                                                | 0.57                                                                                | 0.65                                                                                | 0.39                                                                                | 0.59                                                                                |
| Control Delay           |                                                                                   | 56.0                                                                              | 44.3                                                                              | 6.7                                                                               |                                                                                   | 56.8                                                                              | 41.4                                                                                | 13.5                                                                                | 73.3                                                                                | 25.9                                                                                | 4.6                                                                                 | 49.2                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 56.0                                                                              | 44.3                                                                              | 6.7                                                                               |                                                                                   | 56.8                                                                              | 41.4                                                                                | 13.5                                                                                | 73.3                                                                                | 25.9                                                                                | 4.6                                                                                 | 49.2                                                                                |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | D                                                                                   | B                                                                                   | E                                                                                   | C                                                                                   | A                                                                                   | D                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 40.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 36.5                                                                                |                                                                                     |                                                                                     | 28.3                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 26.1                                                                              | 57.3                                                                              | 0.0                                                                               |                                                                                   | 14.0                                                                              | 31.0                                                                                | 1.5                                                                                 | 18.7                                                                                | 71.7                                                                                | 11.5                                                                                | 18.7                                                                                |
| Queue Length 95th (m)   |                                                                                   | 38.5                                                                              | 65.8                                                                              | 13.8                                                                              |                                                                                   | 23.3                                                                              | 42.3                                                                                | 27.0                                                                                | 31.3                                                                                | #111.7                                                                              | 5.4                                                                                 | 24.4                                                                                |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                               |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                     | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Base Capacity (vph)     |                                                                                   | 423                                                                               | 1150                                                                              | 612                                                                               |                                                                                   | 231                                                                               | 921                                                                                 | 570                                                                                 | 345                                                                                 | 1258                                                                                | 704                                                                                 | 335                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.63                                                                              | 0.51                                                                              | 0.30                                                                              |                                                                                   | 0.60                                                                              | 0.35                                                                                | 0.34                                                                                | 0.55                                                                                | 0.65                                                                                | 0.39                                                                                | 0.57                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 76 (69%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 31.9

Intersection LOS: C

Intersection Capacity Utilization 71.4%

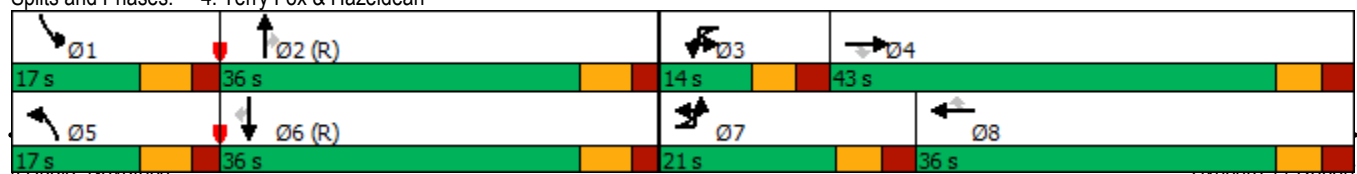
ICU Level of Service C

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean



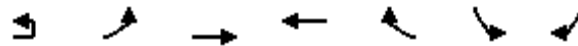
03/10/2024, 11:04:00 AM

Dynamic 11 Report

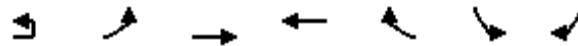




| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Switch Phase            |       |       |
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 35.5  | 35.5  |
| Total Split (s)         | 36.0  | 36.0  |
| Total Split (%)         | 32.7% | 32.7% |
| Maximum Green (s)       | 29.5  | 29.5  |
| Yellow Time (s)         | 4.2   | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 22.0  | 22.0  |
| Pedestrian Calls (#/hr) | 4     | 4     |
| Act Effct Green (s)     | 40.1  | 40.1  |
| Actuated g/C Ratio      | 0.36  | 0.36  |
| v/c Ratio               | 0.37  | 0.45  |
| Control Delay           | 23.4  | 10.3  |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 23.4  | 10.3  |
| LOS                     | C     | B     |
| Approach Delay          | 24.0  |       |
| Approach LOS            | C     |       |
| Queue Length 50th (m)   | 34.6  | 13.9  |
| Queue Length 95th (m)   | 54.6  | 50.9  |
| Internal Link Dist (m)  | 292.2 |       |
| Turn Bay Length (m)     |       | 200.0 |
| Base Capacity (vph)     | 1238  | 737   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.37  | 0.45  |
| Intersection Summary    |       |       |



| Lane Group                 | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       | ↰     | ↰↰    | ↰↰    |       | ↰     | ↰     |
| Traffic Volume (vph)       | 4     | 114   | 682   | 683   | 68    | 68    | 57    |
| Future Volume (vph)        | 4     | 114   | 682   | 683   | 68    | 68    | 57    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 35.0  |       |       | 0.0   | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       |       | 0     | 1     | 1     |
| Taper Length (m)           |       | 40.0  |       |       |       | 40.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  |
| Ped Bike Factor            |       | 1.00  |       | 1.00  |       | 0.99  | 0.98  |
| Frt                        |       |       |       | 0.986 |       |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1719  | 3468  | 3414  | 0     | 1768  | 1537  |
| Flt Permitted              |       | 0.331 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 596   | 3468  | 3414  | 0     | 1752  | 1507  |
| Right Turn on Red          |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 19    |       |       | 63    |
| Link Speed (k/h)           |       |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 157.6 | 314.8 |       | 401.6 |       |
| Travel Time (s)            |       |       | 9.5   | 18.9  |       | 28.9  |       |
| Confl. Peds. (#/hr)        |       | 8     |       |       | 8     | 8     | 6     |
| Peak Hour Factor           | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  |
| Heavy Vehicles (%)         | 1%    | 4%    | 3%    | 3%    | 1%    | 1%    | 4%    |
| Adj. Flow (vph)            | 4     | 127   | 758   | 759   | 76    | 76    | 63    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 131   | 758   | 835   | 0     | 76    | 63    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | L NA  | Left  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 8.0   | 4.0   |       | 4.0   |       |
| Link Offset(m)             |       |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 2     |       | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Thru  |       | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 10.0  |       | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 0.6   |       | 2.0   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex | CI+Ex | CI+Ex |       | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       |       | CI+Ex | CI+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | NA    |       | Perm  | Perm  |
| Protected Phases           |       |       | 2     | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       |       |       | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     |       | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |



| Lane Group              | EBU   | EBL   | EBT   | WBT   | WBR | SBL   | SBR   |
|-------------------------|-------|-------|-------|-------|-----|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  | 10.0  | 10.0  |     | 10.0  | 10.0  |
| Minimum Split (s)       | 16.2  | 16.2  | 16.2  | 31.2  |     | 34.1  | 34.1  |
| Total Split (s)         | 76.0  | 76.0  | 76.0  | 76.0  |     | 34.0  | 34.0  |
| Total Split (%)         | 69.1% | 69.1% | 69.1% | 69.1% |     | 30.9% | 30.9% |
| Maximum Green (s)       | 69.8  | 69.8  | 69.8  | 69.8  |     | 27.9  | 27.9  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7   | 3.7   |     | 3.3   | 3.3   |
| All-Red Time (s)        | 2.5   | 2.5   | 2.5   | 2.5   |     | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.2   | 6.2   | 6.2   |     | 6.1   | 6.1   |
| Lead/Lag                |       |       |       |       |     |       |       |
| Lead-Lag Optimize?      |       |       |       |       |     |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max | C-Max | C-Max |     | None  | None  |
| Walk Time (s)           |       |       |       | 7.0   |     | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |       |       | 18.0  |     | 21.0  | 21.0  |
| Pedestrian Calls (#/hr) |       |       |       | 8     |     | 8     | 8     |
| Act Effct Green (s)     |       | 88.2  | 88.2  | 88.2  |     | 13.9  | 13.9  |
| Actuated g/C Ratio      |       | 0.80  | 0.80  | 0.80  |     | 0.13  | 0.13  |
| v/c Ratio               |       | 0.27  | 0.27  | 0.30  |     | 0.34  | 0.26  |
| Control Delay           |       | 13.6  | 10.1  | 4.7   |     | 61.0  | 25.0  |
| Queue Delay             |       | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |
| Total Delay             |       | 13.6  | 10.1  | 4.7   |     | 61.0  | 25.0  |
| LOS                     |       | B     | B     | A     |     | E     | C     |
| Approach Delay          |       |       | 10.6  | 4.7   |     | 44.7  |       |
| Approach LOS            |       |       | B     | A     |     | D     |       |
| Queue Length 50th (m)   |       | 11.5  | 34.3  | 18.0  |     | 15.1  | 2.4   |
| Queue Length 95th (m)   |       | 31.6  | 62.3  | 48.1  |     | m21.8 | m9.6  |
| Internal Link Dist (m)  |       |       | 133.6 | 290.8 |     | 377.6 |       |
| Turn Bay Length (m)     |       | 35.0  |       |       |     | 30.0  |       |
| Base Capacity (vph)     |       | 478   | 2781  | 2741  |     | 444   | 429   |
| Starvation Cap Reductn  |       | 0     | 0     | 0     |     | 0     | 0     |
| Spillback Cap Reductn   |       | 0     | 0     | 0     |     | 0     | 0     |
| Storage Cap Reductn     |       | 0     | 0     | 0     |     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.27  | 0.27  | 0.30  |     | 0.17  | 0.15  |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 73 (66%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.34

Intersection Signal Delay: 10.5

Intersection LOS: B

Intersection Capacity Utilization 57.1%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Hazeldean & Edgewater



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 88                                                                                | 1                                                                                  | 1244                                                                                | 30                                                                                  | 1                                                                                   | 154                                                                                 | 916                                                                                 |
| Future Volume (vph)        | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 88                                                                                | 1                                                                                  | 1244                                                                                | 30                                                                                  | 1                                                                                   | 154                                                                                 | 916                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 1.00                                                                              | 0.99                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.887                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                    | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1321                                                                              | 0                                                                                 | 1567                                                                              | 1521                                                                              | 0                                                                                 | 1768                                                                               | 3489                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3402                                                                                |
| Flt Permitted              | 0.692                                                                             |                                                                                   |                                                                                   | 0.755                                                                             |                                                                                   |                                                                                   | 0.264                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.160                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1286                                                                              | 1321                                                                              | 0                                                                                 | 1244                                                                              | 1521                                                                              | 0                                                                                 | 491                                                                                | 3489                                                                                | 0                                                                                   | 0                                                                                   | 292                                                                                 | 3402                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                    | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                    | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 2                                                                                 | 1                                                                                  |                                                                                     | 2                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                               | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 33%                                                                               | 14%                                                                               | 50%                                                                               | 3%                                                                                | 1%                                                                                 | 2%                                                                                  | 3%                                                                                  | 1%                                                                                  | 3%                                                                                  | 5%                                                                                  |
| Adj. Flow (vph)            | 16                                                                                | 1                                                                                 | 3                                                                                 | 16                                                                                | 2                                                                                 | 98                                                                                | 1                                                                                  | 1382                                                                                | 33                                                                                  | 1                                                                                   | 171                                                                                 | 1018                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 16                                                                                | 4                                                                                 | 0                                                                                 | 16                                                                                | 100                                                                               | 0                                                                                 | 1                                                                                  | 1415                                                                                | 0                                                                                   | 0                                                                                   | 172                                                                                 | 1018                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                    | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 12    |
| Future Volume (vph)        | 12    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.98  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1480  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1447  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 35    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 1     |
| Peak Hour Factor           | 0.90  |
| Heavy Vehicles (%)         | 8%    |
| Adj. Flow (vph)            | 13    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 13    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.5                                                                              | 36.5                                                                              |                                                                                   | 36.5                                                                              | 36.5                                                                              |                                                                                   | 34.5                                                                               | 34.5                                                                                |                                                                                     | 34.5                                                                                | 34.5                                                                                | 34.5                                                                                |
| Total Split (s)         | 37.0                                                                              | 37.0                                                                              |                                                                                   | 37.0                                                                              | 37.0                                                                              |                                                                                   | 73.0                                                                               | 73.0                                                                                |                                                                                     | 73.0                                                                                | 73.0                                                                                | 73.0                                                                                |
| Total Split (%)         | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 66.4%                                                                              | 66.4%                                                                               |                                                                                     | 66.4%                                                                               | 66.4%                                                                               | 66.4%                                                                               |
| Maximum Green (s)       | 30.5                                                                              | 30.5                                                                              |                                                                                   | 30.5                                                                              | 30.5                                                                              |                                                                                   | 66.5                                                                               | 66.5                                                                                |                                                                                     | 66.5                                                                                | 66.5                                                                                | 66.5                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 3.2                                                                               | 3.2                                                                               |                                                                                   | 3.2                                                                               | 3.2                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                                | 6.5                                                                                 |                                                                                     |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 21.0                                                                                | 21.0                                                                                | 21.0                                                                                |
| Pedestrian Calls (#/hr) | 1                                                                                 | 1                                                                                 |                                                                                   | 2                                                                                 | 2                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 1                                                                                   |
| Act Effct Green (s)     | 14.3                                                                              | 14.3                                                                              |                                                                                   | 14.3                                                                              | 14.3                                                                              |                                                                                   | 82.7                                                                               | 82.7                                                                                |                                                                                     |                                                                                     | 82.7                                                                                | 82.7                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.75                                                                               | 0.75                                                                                |                                                                                     |                                                                                     | 0.75                                                                                | 0.75                                                                                |
| v/c Ratio               | 0.10                                                                              | 0.02                                                                              |                                                                                   | 0.10                                                                              | 0.42                                                                              |                                                                                   | 0.00                                                                               | 0.54                                                                                |                                                                                     |                                                                                     | 0.79                                                                                | 0.40                                                                                |
| Control Delay           | 39.2                                                                              | 25.2                                                                              |                                                                                   | 60.4                                                                              | 47.2                                                                              |                                                                                   | 2.0                                                                                | 8.3                                                                                 |                                                                                     |                                                                                     | 39.4                                                                                | 6.4                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 39.2                                                                              | 25.2                                                                              |                                                                                   | 60.4                                                                              | 47.2                                                                              |                                                                                   | 2.0                                                                                | 8.3                                                                                 |                                                                                     |                                                                                     | 39.4                                                                                | 6.4                                                                                 |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | E                                                                                 | D                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | D                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 36.4                                                                              |                                                                                   |                                                                                   | 49.0                                                                              |                                                                                   |                                                                                    | 8.3                                                                                 |                                                                                     |                                                                                     |                                                                                     | 11.0                                                                                |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 3.0                                                                               | 0.2                                                                               |                                                                                   | 3.4                                                                               | 12.2                                                                              |                                                                                   | 0.0                                                                                | 100.5                                                                               |                                                                                     |                                                                                     | 13.8                                                                                | 25.3                                                                                |
| Queue Length 95th (m)   | 7.3                                                                               | 2.6                                                                               |                                                                                   | 10.4                                                                              | 30.7                                                                              |                                                                                   | m0.0                                                                               | 22.3                                                                                |                                                                                     |                                                                                     | #73.0                                                                               | 69.0                                                                                |
| Internal Link Dist (m)  |                                                                                   | 193.1                                                                             |                                                                                   |                                                                                   | 258.1                                                                             |                                                                                   |                                                                                    | 229.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 336.0                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 65.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |                                                                                     |
| Base Capacity (vph)     | 356                                                                               | 368                                                                               |                                                                                   | 344                                                                               | 457                                                                               |                                                                                   | 369                                                                                | 2625                                                                                |                                                                                     |                                                                                     | 219                                                                                 | 2558                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.04                                                                              | 0.01                                                                              |                                                                                   | 0.05                                                                              | 0.22                                                                              |                                                                                   | 0.00                                                                               | 0.54                                                                                |                                                                                     |                                                                                     | 0.79                                                                                | 0.40                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 16 (15%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 11.4

Intersection LOS: B

Intersection Capacity Utilization 72.0%

ICU Level of Service C

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 73.0  |
| Total Split (%)         | 66.4% |
| Maximum Green (s)       | 66.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 1     |
| Act Effct Green (s)     | 82.7  |
| Actuated g/C Ratio      | 0.75  |
| v/c Ratio               | 0.01  |
| Control Delay           | 0.4   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.4   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.5   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1097  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (vph)       | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1126                                                                                | 1                                                                                   | 0                                                                                   | 768                                                                                 | 0                                                                                   |
| Future Volume (vph)        | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1126                                                                                | 1                                                                                   | 0                                                                                   | 768                                                                                 | 0                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 35.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 | 55.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)           | 25.0                                                                              |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     | 50.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Frt                        | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1861                                                                              | 1582                                                                              | 0                                                                                 | 1768                                                                              | 1861                                                                              | 0                                                                                 | 1768                                                                               | 3468                                                                                | 0                                                                                   | 1861                                                                                | 3370                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   | 0.769                                                                             |                                                                                   |                                                                                   | 0.332                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1861                                                                              | 1582                                                                              | 0                                                                                 | 1431                                                                              | 1861                                                                              | 0                                                                                 | 618                                                                                | 3468                                                                                | 0                                                                                   | 1861                                                                                | 3370                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 191                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 207.5                                                                             |                                                                                   |                                                                                   | 88.7                                                                              |                                                                                   |                                                                                    | 316.2                                                                               |                                                                                     |                                                                                     | 253.3                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 14.9                                                                              |                                                                                   |                                                                                   | 10.6                                                                              |                                                                                   |                                                                                    | 16.3                                                                                |                                                                                     |                                                                                     | 13.0                                                                                |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                               | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 3%                                                                                  | 1%                                                                                  | 1%                                                                                  | 6%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 11                                                                                 | 1251                                                                                | 1                                                                                   | 0                                                                                   | 853                                                                                 | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 3                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 11                                                                                 | 1252                                                                                | 0                                                                                   | 0                                                                                   | 853                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                               | Left                                                                                | Right                                                                               | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 12.0                                                                                |                                                                                     |                                                                                     | 12.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |                                                                                     |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |                                                                                     |
| Detector 1 Type            | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                              | CI+Ex                                                                               |                                                                                     | CI+Ex                                                                               | CI+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                    | CI+Ex                                                                               |                                                                                     |                                                                                     | CI+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              |                                                                                   |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)          | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.5                                                                               | 32.5                                                                                |                                                                                     | 32.5                                                                                | 32.5                                                                                |                                                                                     |



|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              |                                                                                   | 77.0                                                                               | 77.0                                                                                |                                                                                     | 77.0                                                                                | 77.0                                                                                |                                                                                     |
| Total Split (%)         | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 70.0%                                                                              | 70.0%                                                                               |                                                                                     | 70.0%                                                                               | 70.0%                                                                               |                                                                                     |
| Maximum Green (s)       | 26.8                                                                              | 26.8                                                                              |                                                                                   | 26.8                                                                              | 26.8                                                                              |                                                                                   | 70.5                                                                               | 70.5                                                                                |                                                                                     | 70.5                                                                                | 70.5                                                                                |                                                                                     |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 |                                                                                     |
| All-Red Time (s)        | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.5                                                                                | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                               | 19.0                                                                                |                                                                                     | 19.0                                                                                | 19.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 13.2                                                                              |                                                                                   | 13.2                                                                              |                                                                                   |                                                                                   | 102.3                                                                              | 102.3                                                                               |                                                                                     |                                                                                     | 102.3                                                                               |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.93                                                                               | 0.93                                                                                |                                                                                     |                                                                                     | 0.93                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.01                                                                              |                                                                                   | 0.01                                                                              |                                                                                   |                                                                                   | 0.02                                                                               | 0.39                                                                                |                                                                                     |                                                                                     | 0.27                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 0.0                                                                               |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                   | 9.3                                                                                | 8.5                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 0.0                                                                               |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                   | 9.3                                                                                | 8.5                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| LOS                     |                                                                                   | A                                                                                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                    | 8.5                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 0.0                                                                               |                                                                                   | 0.2                                                                               |                                                                                   |                                                                                   | 0.0                                                                                | 1.6                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | 0.0                                                                               |                                                                                   | 1.4                                                                               |                                                                                   |                                                                                   | m2.7                                                                               | 144.6                                                                               |                                                                                     |                                                                                     | 1.8                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   | 183.5                                                                             |                                                                                   |                                                                                   | 64.7                                                                              |                                                                                   |                                                                                    | 292.2                                                                               |                                                                                     |                                                                                     | 229.3                                                                               |                                                                                     |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 529                                                                               |                                                                                   | 348                                                                               |                                                                                   |                                                                                   | 574                                                                                | 3224                                                                                |                                                                                     |                                                                                     | 3133                                                                                |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.01                                                                              |                                                                                   | 0.00                                                                              |                                                                                   |                                                                                   | 0.02                                                                               | 0.39                                                                                |                                                                                     |                                                                                     | 0.27                                                                                |                                                                                     |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 26 (24%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.39

Intersection Signal Delay: 5.2

Intersection LOS: A

Intersection Capacity Utilization 51.8%

ICU Level of Service A

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Terry Fox & Tony Graham Rec

|                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |
| Ø2 (R)                                                                              |                                                                                     |                                                                                     | Ø4                                                                                    |
| 77 s                                                                                |                                                                                     |                                                                                     | 33 s                                                                                  |
|  |  |  |  |
| Ø5 (R)                                                                              |                                                                                     |                                                                                     | Ø8                                                                                    |
| 77 s                                                                                |                                                                                     |                                                                                     | 33 s                                                                                  |

8: Terry Fox & Sobey's  
AM Peak Hour

560 Hazeldean Road  
2025 Existing Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1109                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 676                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1109                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 676                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 10.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 30.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.91                                                                                | 0.91                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 1.00                                                                              | 0.99                                                                              | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.910                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.993                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.996                                                                               |
| Flt Protected              |                                                                                   | 0.985                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1527                                                                              | 0                                                                                 | 0                                                                                 | 1742                                                                              | 1567                                                                              | 1581                                                                               | 5038                                                                                | 0                                                                                   | 0                                                                                   | 1722                                                                                | 3421                                                                                |
| Flt Permitted              |                                                                                   | 0.894                                                                             |                                                                                   |                                                                                   | 0.713                                                                             |                                                                                   | 0.312                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.202                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1385                                                                              | 0                                                                                 | 0                                                                                 | 1299                                                                              | 1546                                                                              | 518                                                                                | 5038                                                                                | 0                                                                                   | 0                                                                                   | 366                                                                                 | 3421                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 18                                                                                |                                                                                   |                                                                                   |                                                                                   | 109                                                                               |                                                                                    | 11                                                                                  |                                                                                     |                                                                                     |                                                                                     | 3                                                                                   |
| Link Speed (k/h)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 132.0                                                                             |                                                                                   |                                                                                   | 152.6                                                                             |                                                                                   |                                                                                    | 140.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 142.7                                                                               |
| Travel Time (s)            |                                                                                   | 15.8                                                                              |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                    | 7.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.3                                                                                 |
| Confl. Peds. (#/hr)        | 1                                                                                 |                                                                                   | 2                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 4                                                                                  |                                                                                     | 2                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                               | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 29%                                                                               | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 13%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 4%                                                                                  | 4%                                                                                  |
| Adj. Flow (vph)            | 8                                                                                 | 1                                                                                 | 18                                                                                | 33                                                                                | 1                                                                                 | 58                                                                                | 9                                                                                  | 1232                                                                                | 58                                                                                  | 3                                                                                   | 31                                                                                  | 751                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 27                                                                                | 0                                                                                 | 0                                                                                 | 34                                                                                | 58                                                                                | 9                                                                                  | 1290                                                                                | 0                                                                                   | 0                                                                                   | 34                                                                                  | 771                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                              | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 5                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |

|                            |      |    |
|----------------------------|------|----|
| Lane Group                 | SBR  | Ø9 |
| Lane Configurations        |      |    |
| Traffic Volume (vph)       | 18   |    |
| Future Volume (vph)        | 18   |    |
| Ideal Flow (vphpl)         | 1800 |    |
| Storage Length (m)         | 0.0  |    |
| Storage Lanes              | 0    |    |
| Taper Length (m)           |      |    |
| Lane Util. Factor          | 0.95 |    |
| Ped Bike Factor            |      |    |
| Frt                        |      |    |
| Flt Protected              |      |    |
| Satd. Flow (prot)          | 0    |    |
| Flt Permitted              |      |    |
| Satd. Flow (perm)          | 0    |    |
| Right Turn on Red          | Yes  |    |
| Satd. Flow (RTOR)          |      |    |
| Link Speed (k/h)           |      |    |
| Link Distance (m)          |      |    |
| Travel Time (s)            |      |    |
| Confl. Peds. (#/hr)        | 4    |    |
| Confl. Bikes (#/hr)        |      |    |
| Peak Hour Factor           | 0.90 |    |
| Heavy Vehicles (%)         | 1%   |    |
| Adj. Flow (vph)            | 20   |    |
| Shared Lane Traffic (%)    |      |    |
| Lane Group Flow (vph)      | 0    |    |
| Enter Blocked Intersection | No   |    |
| Lane Alignment             | R NA |    |
| Median Width(m)            |      |    |
| Link Offset(m)             |      |    |
| Crosswalk Width(m)         |      |    |
| Two way Left Turn Lane     |      |    |
| Headway Factor             | 1.01 |    |
| Turning Speed (k/h)        | 14   |    |
| Number of Detectors        |      |    |
| Detector Template          |      |    |
| Leading Detector (m)       |      |    |
| Trailing Detector (m)      |      |    |
| Detector 1 Position(m)     |      |    |
| Detector 1 Size(m)         |      |    |
| Detector 1 Type            |      |    |
| Detector 1 Channel         |      |    |
| Detector 1 Extend (s)      |      |    |
| Detector 1 Queue (s)       |      |    |
| Detector 1 Delay (s)       |      |    |
| Detector 2 Position(m)     |      |    |
| Detector 2 Size(m)         |      |    |
| Detector 2 Type            |      |    |
| Detector 2 Channel         |      |    |
| Detector 2 Extend (s)      |      |    |
| Turn Type                  |      |    |
| Protected Phases           | 9    |    |
| Permitted Phases           |      |    |
| Detector Phase             |      |    |

8: Terry Fox & Sobey's  
AM Peak Hour

560 Hazeldean Road  
2025 Existing Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 5.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 11.2                                                                               | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                | 26.0                                                                                |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 15.0                                                                               | 72.0                                                                                |                                                                                     | 57.0                                                                                | 57.0                                                                                | 57.0                                                                                |
| Total Split (%)         | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 30.0%                                                                             | 30.0%                                                                             | 30.0%                                                                             | 13.6%                                                                              | 65.5%                                                                               |                                                                                     | 51.8%                                                                               | 51.8%                                                                               | 51.8%                                                                               |
| Maximum Green (s)       | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 9.0                                                                                | 66.0                                                                                |                                                                                     | 51.0                                                                                | 51.0                                                                                | 51.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 1.8                                                                                | 1.8                                                                                 |                                                                                     | 1.8                                                                                 | 1.8                                                                                 | 1.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               | 6.0                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 6.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               |                                                                                    | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 17.0                                                                              | 17.0                                                                              |                                                                                   | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              |                                                                                    | 13.0                                                                                |                                                                                     | 13.0                                                                                | 13.0                                                                                | 13.0                                                                                |
| Pedestrian Calls (#/hr) | 2                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 1                                                                                 |                                                                                    | 2                                                                                   |                                                                                     | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| Act Effct Green (s)     |                                                                                   | 12.8                                                                              |                                                                                   |                                                                                   | 12.8                                                                              | 12.8                                                                              | 82.6                                                                               | 82.6                                                                                |                                                                                     |                                                                                     | 80.1                                                                                | 80.1                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.12                                                                              | 0.12                                                                              | 0.75                                                                               | 0.75                                                                                |                                                                                     |                                                                                     | 0.73                                                                                | 0.73                                                                                |
| v/c Ratio               |                                                                                   | 0.15                                                                              |                                                                                   |                                                                                   | 0.23                                                                              | 0.21                                                                              | 0.02                                                                               | 0.34                                                                                |                                                                                     |                                                                                     | 0.13                                                                                | 0.31                                                                                |
| Control Delay           |                                                                                   | 23.8                                                                              |                                                                                   |                                                                                   | 45.5                                                                              | 2.3                                                                               | 3.0                                                                                | 4.2                                                                                 |                                                                                     |                                                                                     | 4.5                                                                                 | 2.8                                                                                 |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 23.8                                                                              |                                                                                   |                                                                                   | 45.5                                                                              | 2.3                                                                               | 3.0                                                                                | 4.2                                                                                 |                                                                                     |                                                                                     | 4.5                                                                                 | 2.8                                                                                 |
| LOS                     |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 | A                                                                                 | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 23.8                                                                              |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                    | 4.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 2.9                                                                                 |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 1.7                                                                               |                                                                                   |                                                                                   | 6.4                                                                               | 0.0                                                                               | 0.4                                                                                | 36.9                                                                                |                                                                                     |                                                                                     | 0.4                                                                                 | 4.8                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 8.1                                                                               |                                                                                   |                                                                                   | 13.3                                                                              | 1.3                                                                               | m0.4                                                                               | 27.3                                                                                |                                                                                     |                                                                                     | m2.7                                                                                | 17.8                                                                                |
| Internal Link Dist (m)  |                                                                                   | 108.0                                                                             |                                                                                   |                                                                                   | 128.6                                                                             |                                                                                   |                                                                                    | 116.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 118.7                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 341                                                                               |                                                                                   |                                                                                   | 307                                                                               | 448                                                                               | 476                                                                                | 3785                                                                                |                                                                                     |                                                                                     | 266                                                                                 | 2492                                                                                |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.08                                                                              |                                                                                   |                                                                                   | 0.11                                                                              | 0.13                                                                              | 0.02                                                                               | 0.34                                                                                |                                                                                     |                                                                                     | 0.13                                                                                | 0.31                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 80 (73%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.34

Intersection Signal Delay: 4.5

Intersection LOS: A

Intersection Capacity Utilization 61.7%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Terry Fox & Sobey's





| Lane Group              | SBR | Ø9 |
|-------------------------|-----|----|
| Switch Phase            |     |    |
| Minimum Initial (s)     | 3.0 |    |
| Minimum Split (s)       | 5.0 |    |
| Total Split (s)         | 5.0 |    |
| Total Split (%)         | 5%  |    |
| Maximum Green (s)       | 3.0 |    |
| Yellow Time (s)         | 2.0 |    |
| All-Red Time (s)        | 0.0 |    |
| Lost Time Adjust (s)    |     |    |
| Total Lost Time (s)     |     |    |
| Lead/Lag                |     |    |
| Lead-Lag Optimize?      |     |    |
| Vehicle Extension (s)   | 3.0 |    |
| Recall Mode             | Max |    |
| Walk Time (s)           |     |    |
| Flash Dont Walk (s)     |     |    |
| Pedestrian Calls (#/hr) |     |    |
| Act Effct Green (s)     |     |    |
| Actuated g/C Ratio      |     |    |
| v/c Ratio               |     |    |
| Control Delay           |     |    |
| Queue Delay             |     |    |
| Total Delay             |     |    |
| LOS                     |     |    |
| Approach Delay          |     |    |
| Approach LOS            |     |    |
| Queue Length 50th (m)   |     |    |
| Queue Length 95th (m)   |     |    |
| Internal Link Dist (m)  |     |    |
| Turn Bay Length (m)     |     |    |
| Base Capacity (vph)     |     |    |
| Starvation Cap Reductn  |     |    |
| Spillback Cap Reductn   |     |    |
| Storage Cap Reductn     |     |    |
| Reduced v/c Ratio       |     |    |
| Intersection Summary    |     |    |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |   |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                   | 1099                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 622                                                                                 |
| Future Volume (vph)        | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                   | 1099                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 622                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 15.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 65.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 120.0                                                                               |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 20.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 1.00                                                                              | 0.99                                                                              |                                                                                   | 1.00                                                                                | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.909                                                                             |                                                                                   |                                                                                   | 0.858                                                                             |                                                                                   |                                                                                     | 0.995                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1465                                                                              | 0                                                                                 | 1734                                                                              | 1562                                                                              | 0                                                                                 | 1069                                                                                | 3481                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3435                                                                                |
| Flt Permitted              | 0.647                                                                             |                                                                                   |                                                                                   | 0.739                                                                             |                                                                                   |                                                                                   | 0.387                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.195                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1203                                                                              | 1465                                                                              | 0                                                                                 | 1347                                                                              | 1562                                                                              | 0                                                                                 | 435                                                                                 | 3481                                                                                | 0                                                                                   | 0                                                                                   | 362                                                                                 | 3435                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 17                                                                                |                                                                                   |                                                                                   | 67                                                                                |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 40                                                                                |                                                                                   |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 65.4                                                                              |                                                                                   |                                                                                   | 381.2                                                                             |                                                                                   |                                                                                     | 479.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 200.7                                                                               |
| Travel Time (s)            |                                                                                   | 4.7                                                                               |                                                                                   |                                                                                   | 34.3                                                                              |                                                                                   |                                                                                     | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     | 10.3                                                                                |
| Confl. Peds. (#/hr)        | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                   |                                                                                     | 6                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 20%                                                                               | 13%                                                                               | 3%                                                                                | 20%                                                                               | 1%                                                                                | 67%                                                                                 | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 4%                                                                                  |
| Adj. Flow (vph)            | 22                                                                                | 11                                                                                | 17                                                                                | 33                                                                                | 6                                                                                 | 112                                                                               | 7                                                                                   | 1221                                                                                | 46                                                                                  | 1                                                                                   | 84                                                                                  | 691                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 22                                                                                | 28                                                                                | 0                                                                                 | 33                                                                                | 118                                                                               | 0                                                                                 | 7                                                                                   | 1267                                                                                | 0                                                                                   | 0                                                                                   | 85                                                                                  | 691                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                                | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 10    |
| Future Volume (vph)        | 10    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 55.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.98  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1543  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 30    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 2     |
| Peak Hour Factor           | 0.90  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 11    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 11    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 28.3                                                                               | 28.3                                                                                |                                                                                     | 28.3                                                                                | 28.3                                                                                | 28.3                                                                                |
| Total Split (s)         | 38.0                                                                              | 38.0                                                                              |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 72.0                                                                               | 72.0                                                                                |                                                                                     | 72.0                                                                                | 72.0                                                                                | 72.0                                                                                |
| Total Split (%)         | 34.5%                                                                             | 34.5%                                                                             |                                                                                   | 34.5%                                                                             | 34.5%                                                                             |                                                                                   | 65.5%                                                                              | 65.5%                                                                               |                                                                                     | 65.5%                                                                               | 65.5%                                                                               | 65.5%                                                                               |
| Maximum Green (s)       | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 65.7                                                                               | 65.7                                                                                |                                                                                     | 65.7                                                                                | 65.7                                                                                | 65.7                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.1                                                                                | 2.1                                                                                 |                                                                                     | 2.1                                                                                 | 2.1                                                                                 | 2.1                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.3                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 15.0                                                                                |
| Pedestrian Calls (#/hr) | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 6                                                                                  | 6                                                                                   |                                                                                     | 2                                                                                   | 2                                                                                   | 2                                                                                   |
| Act Effct Green (s)     | 14.3                                                                              | 14.3                                                                              |                                                                                   | 14.3                                                                              | 14.3                                                                              |                                                                                   | 83.4                                                                               | 83.4                                                                                |                                                                                     |                                                                                     | 83.4                                                                                | 83.4                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.76                                                                               | 0.76                                                                                |                                                                                     |                                                                                     | 0.76                                                                                | 0.76                                                                                |
| v/c Ratio               | 0.14                                                                              | 0.14                                                                              |                                                                                   | 0.19                                                                              | 0.45                                                                              |                                                                                   | 0.02                                                                               | 0.48                                                                                |                                                                                     |                                                                                     | 0.31                                                                                | 0.27                                                                                |
| Control Delay           | 40.6                                                                              | 22.7                                                                              |                                                                                   | 41.9                                                                              | 24.8                                                                              |                                                                                   | 6.0                                                                                | 6.8                                                                                 |                                                                                     |                                                                                     | 15.9                                                                                | 7.7                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 40.6                                                                              | 22.7                                                                              |                                                                                   | 41.9                                                                              | 24.8                                                                              |                                                                                   | 6.0                                                                                | 6.8                                                                                 |                                                                                     |                                                                                     | 15.9                                                                                | 7.7                                                                                 |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 30.6                                                                              |                                                                                   |                                                                                   | 28.5                                                                              |                                                                                   |                                                                                    | 6.8                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.6                                                                                 |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   | 4.1                                                                               | 2.0                                                                               |                                                                                   | 6.2                                                                               | 9.7                                                                               |                                                                                   | 0.2                                                                                | 33.1                                                                                |                                                                                     |                                                                                     | 2.6                                                                                 | 10.9                                                                                |
| Queue Length 95th (m)   | 8.9                                                                               | 7.9                                                                               |                                                                                   | 11.9                                                                              | 20.7                                                                              |                                                                                   | 2.2                                                                                | 91.0                                                                                |                                                                                     |                                                                                     | 23.7                                                                                | 59.3                                                                                |
| Internal Link Dist (m)  |                                                                                   | 41.4                                                                              |                                                                                   |                                                                                   | 357.2                                                                             |                                                                                   |                                                                                    | 455.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 176.7                                                                               |
| Turn Bay Length (m)     | 15.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 120.0                                                                               |                                                                                     |
| Base Capacity (vph)     | 349                                                                               | 438                                                                               |                                                                                   | 391                                                                               | 501                                                                               |                                                                                   | 329                                                                                | 2640                                                                                |                                                                                     |                                                                                     | 274                                                                                 | 2604                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.06                                                                              | 0.06                                                                              |                                                                                   | 0.08                                                                              | 0.24                                                                              |                                                                                   | 0.02                                                                               | 0.48                                                                                |                                                                                     |                                                                                     | 0.31                                                                                | 0.27                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 40 (36%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 9.4

Intersection LOS: A

Intersection Capacity Utilization 66.3%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Terry Fox & Halkirk/Winchester







|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 28.3  |
| Total Split (s)         | 72.0  |
| Total Split (%)         | 65.5% |
| Maximum Green (s)       | 65.7  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.1   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.3   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 15.0  |
| Pedestrian Calls (#/hr) | 2     |
| Act Effct Green (s)     | 83.4  |
| Actuated g/C Ratio      | 0.76  |
| v/c Ratio               | 0.01  |
| Control Delay           | 5.0   |
| Queue Delay             | 0.0   |
| Total Delay             | 5.0   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | m1.1  |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 55.0  |
| Base Capacity (vph)     | 1177  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |



| Lane Group                 | EBU   | EBL   | EBT   | WBU   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       | ↰     | ↰↰    |       | ↰↰    | ↰     | ↰     | ↰     |
| Traffic Volume (vph)       | 2     | 25    | 905   | 1     | 1230  | 87    | 110   | 21    |
| Future Volume (vph)        | 2     | 25    | 905   | 1     | 1230  | 87    | 110   | 21    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 50.0  |       | 0.0   |       | 175.0 | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       | 0     |       | 1     | 1     | 1     |
| Taper Length (m)           |       | 65.0  |       | 10.0  |       |       | 20.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  | 1.00  |
| Ped Bike Factor            |       |       |       |       |       | 0.97  |       |       |
| Frt                        |       |       |       |       |       | 0.850 |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1768  | 3502  | 0     | 3537  | 1582  | 1768  | 1582  |
| Flt Permitted              |       | 0.171 |       |       | 0.955 |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 318   | 3502  | 0     | 3377  | 1527  | 1768  | 1582  |
| Right Turn on Red          |       |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       |       |       | 97    |       | 23    |
| Link Speed (k/h)           |       |       | 60    |       | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 568.4 |       | 297.5 |       | 251.2 |       |
| Travel Time (s)            |       |       | 34.1  |       | 17.9  |       | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |       |       |       | 5     |       |       |
| Peak Hour Factor           | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  |
| Heavy Vehicles (%)         | 1%    | 1%    | 2%    | 1%    | 1%    | 1%    | 1%    | 1%    |
| Adj. Flow (vph)            | 2     | 28    | 1006  | 1     | 1367  | 97    | 122   | 23    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 30    | 1006  | 0     | 1368  | 97    | 122   | 23    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | Left  | Left  | R NA  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 6.0   |       | 4.0   |       | 6.0   |       |
| Link Offset(m)             |       |       | 0.0   |       | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   |       | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       | 14    |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 1     | 2     | 1     | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Left  | Thru  | Right | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 2.0   | 10.0  | 2.0   | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 2.0   | 0.6   | 2.0   | 2.0   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex | CI+Ex | CI+Ex | CI+Ex | CI+Ex | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   |       | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   |       | 0.6   |       |       |       |
| Detector 2 Type            |       |       | CI+Ex |       | CI+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   |       | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | Perm  | NA    | Perm  | Perm  | Perm  |
| Protected Phases           |       |       | 2     |       | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       | 6     |       | 6     | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     | 6     | 6     | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |       |



| Lane Group              | EBU   | EBL   | EBT   | WBU   | WBT   | WBR   | SBL   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  | 10.0  |
| Minimum Split (s)       | 16.1  | 16.1  | 16.1  | 26.1  | 26.1  | 26.1  | 35.1  | 35.1  |
| Total Split (s)         | 84.0  | 84.0  | 84.0  | 84.0  | 84.0  | 84.0  | 36.0  | 36.0  |
| Total Split (%)         | 70.0% | 70.0% | 70.0% | 70.0% | 70.0% | 70.0% | 30.0% | 30.0% |
| Maximum Green (s)       | 77.9  | 77.9  | 77.9  | 77.9  | 77.9  | 77.9  | 29.9  | 29.9  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.3   | 3.3   |
| All-Red Time (s)        | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.4   | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.1   | 6.1   |       | 6.1   | 6.1   | 6.1   | 6.1   |
| Lead/Lag                |       |       |       |       |       |       |       |       |
| Lead-Lag Optimize?      |       |       |       |       |       |       |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max | C-Max | C-Max | C-Max | C-Max | None  | None  |
| Walk Time (s)           |       |       |       | 7.0   | 7.0   | 7.0   | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |       |       | 13.0  | 13.0  | 13.0  | 22.0  | 22.0  |
| Pedestrian Calls (#/hr) |       |       |       | 5     | 5     | 5     | 1     | 1     |
| Act Effct Green (s)     |       | 91.8  | 91.8  |       | 91.8  | 91.8  | 16.0  | 16.0  |
| Actuated g/C Ratio      |       | 0.76  | 0.76  |       | 0.76  | 0.76  | 0.13  | 0.13  |
| v/c Ratio               |       | 0.12  | 0.38  |       | 0.53  | 0.08  | 0.52  | 0.10  |
| Control Delay           |       | 6.8   | 5.9   |       | 1.8   | 0.1   | 54.7  | 15.5  |
| Queue Delay             |       | 0.0   | 0.0   |       | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             |       | 6.8   | 5.9   |       | 1.8   | 0.1   | 54.7  | 15.5  |
| LOS                     |       | A     | A     |       | A     | A     | D     | B     |
| Approach Delay          |       |       | 5.9   |       | 1.7   |       | 48.5  |       |
| Approach LOS            |       |       | A     |       | A     |       | D     |       |
| Queue Length 50th (m)   |       | 1.3   | 28.5  |       | 6.4   | 0.1   | 25.6  | 0.0   |
| Queue Length 95th (m)   |       | 6.3   | 62.6  |       | 12.2  | 0.1   | 37.3  | 6.1   |
| Internal Link Dist (m)  |       |       | 544.4 |       | 273.5 |       | 227.2 |       |
| Turn Bay Length (m)     |       | 50.0  |       |       |       | 175.0 | 30.0  |       |
| Base Capacity (vph)     |       | 243   | 2679  |       | 2584  | 1191  | 440   | 411   |
| Starvation Cap Reductn  |       | 0     | 0     |       | 0     | 0     | 0     | 0     |
| Spillback Cap Reductn   |       | 0     | 0     |       | 0     | 0     | 0     | 0     |
| Storage Cap Reductn     |       | 0     | 0     |       | 0     | 0     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.12  | 0.38  |       | 0.53  | 0.08  | 0.28  | 0.06  |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 119 (99%), Referenced to phase 2:EBTL and 6:WBTU, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 5.9

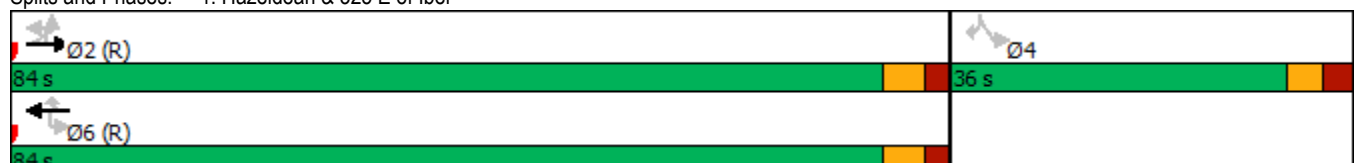
Intersection LOS: A

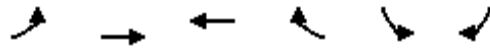
Intersection Capacity Utilization 55.1%

ICU Level of Service B

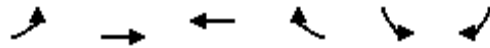
Analysis Period (min) 15

Splits and Phases: 1: Hazeldean & 325 E of Iber





| Lane Group                 | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |
| Traffic Volume (vph)       | 166   | 950   | 1132  | 61    | 94    | 70    |
| Future Volume (vph)        | 166   | 950   | 1132  | 61    | 94    | 70    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         | 75.0  |       |       | 180.0 | 40.0  | 40.0  |
| Storage Lanes              | 1     |       |       | 1     | 2     | 0     |
| Taper Length (m)           | 75.0  |       |       |       | 30.0  |       |
| Lane Util. Factor          | 1.00  | 0.95  | 0.95  | 1.00  | 0.97  | 1.00  |
| Ped Bike Factor            |       |       |       | 0.97  |       | 0.98  |
| Frt                        |       |       |       | 0.850 |       | 0.850 |
| Flt Protected              | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 1768  | 3537  | 3502  | 1582  | 3431  | 1582  |
| Flt Permitted              | 0.159 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 296   | 3537  | 3502  | 1539  | 3431  | 1552  |
| Right Turn on Red          |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 68    |       | 38    |
| Link Speed (k/h)           |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       | 297.5 | 287.2 |       | 237.4 |       |
| Travel Time (s)            |       | 17.9  | 17.2  |       | 17.1  |       |
| Confl. Peds. (#/hr)        | 3     |       |       | 3     |       | 5     |
| Peak Hour Factor           | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  |
| Heavy Vehicles (%)         | 1%    | 1%    | 2%    | 1%    | 1%    | 1%    |
| Adj. Flow (vph)            | 184   | 1056  | 1258  | 68    | 104   | 78    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 184   | 1056  | 1258  | 68    | 104   | 78    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | Left  | Left  | Left  | Right | Left  | R NA  |
| Median Width(m)            |       | 6.0   | 4.0   |       | 10.0  |       |
| Link Offset(m)             |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 24    |       |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 2     | 2     | 1     | 1     | 1     |
| Detector Template          | Left  | Thru  | Thru  | Right | Left  | Right |
| Leading Detector (m)       | 2.0   | 10.0  | 10.0  | 2.0   | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 0.6   | 0.6   | 2.0   | 2.0   | 2.0   |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Detector 2 Position(m)     |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | pm+pt | NA    | NA    | Perm  | Prot  | pm+ov |
| Protected Phases           | 5     | 2     | 6     |       | 4     | 5     |
| Permitted Phases           | 2     |       |       | 6     |       | 4     |
| Detector Phase             | 5     | 2     | 6     | 6     | 4     | 5     |
| Switch Phase               |       |       |       |       |       |       |



| Lane Group              | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|-------------------------|-------|-------|-------|-------|-------|-------|
| Minimum Initial (s)     | 5.0   | 10.0  | 10.0  | 10.0  | 10.0  | 5.0   |
| Minimum Split (s)       | 11.2  | 16.3  | 31.3  | 31.3  | 31.2  | 11.2  |
| Total Split (s)         | 20.0  | 87.0  | 67.0  | 67.0  | 33.0  | 20.0  |
| Total Split (%)         | 16.7% | 72.5% | 55.8% | 55.8% | 27.5% | 16.7% |
| Maximum Green (s)       | 13.8  | 80.7  | 60.7  | 60.7  | 26.8  | 13.8  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7   | 3.7   | 3.3   | 3.7   |
| All-Red Time (s)        | 2.5   | 2.6   | 2.6   | 2.6   | 2.9   | 2.5   |
| Lost Time Adjust (s)    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.2   | 6.3   | 6.3   | 6.3   | 6.2   | 6.2   |
| Lead/Lag                | Lead  |       | Lag   | Lag   |       | Lead  |
| Lead-Lag Optimize?      |       |       |       |       |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | C-Max | C-Max | C-Max | None  | None  |
| Walk Time (s)           |       |       | 7.0   | 7.0   | 7.0   |       |
| Flash Dont Walk (s)     |       |       | 18.0  | 18.0  | 18.0  |       |
| Pedestrian Calls (#/hr) |       |       | 3     | 3     | 5     |       |
| Act Effct Green (s)     | 94.6  | 94.5  | 78.7  | 78.7  | 13.0  | 22.6  |
| Actuated g/C Ratio      | 0.79  | 0.79  | 0.66  | 0.66  | 0.11  | 0.19  |
| v/c Ratio               | 0.53  | 0.38  | 0.55  | 0.07  | 0.28  | 0.24  |
| Control Delay           | 15.1  | 4.2   | 5.3   | 0.2   | 49.7  | 20.0  |
| Queue Delay             | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| Total Delay             | 15.1  | 4.2   | 5.3   | 0.2   | 49.7  | 20.0  |
| LOS                     | B     | A     | A     | A     | D     | B     |
| Approach Delay          |       | 5.8   | 5.1   |       | 36.9  |       |
| Approach LOS            |       | A     | A     |       | D     |       |
| Queue Length 50th (m)   | 5.9   | 22.1  | 5.3   | 0.0   | 11.1  | 7.2   |
| Queue Length 95th (m)   | 33.8  | 48.5  | 9.0   | m0.0  | 16.5  | 14.6  |
| Internal Link Dist (m)  |       | 273.5 | 263.2 |       | 213.4 |       |
| Turn Bay Length (m)     | 75.0  |       |       | 180.0 | 40.0  | 40.0  |
| Base Capacity (vph)     | 407   | 2785  | 2297  | 1033  | 766   | 384   |
| Starvation Cap Reductn  | 0     | 0     | 0     | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     | 0     | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     | 0     | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.45  | 0.38  | 0.55  | 0.07  | 0.14  | 0.20  |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 111 (93%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 7.5

Intersection LOS: A

Intersection Capacity Utilization 68.6%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Hazeldean & Roger Griffiths



3: Mantra/Tillage & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2025 Existing Traffic

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 1                                                                                 | 82                                                                                | 853                                                                               | 5                                                                                 | 19                                                                                | 1062                                                                              | 212                                                                                 | 11                                                                                  | 2                                                                                   | 23                                                                                  | 177                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 1                                                                                 | 82                                                                                | 853                                                                               | 5                                                                                 | 19                                                                                | 1062                                                                              | 212                                                                                 | 11                                                                                  | 2                                                                                   | 23                                                                                  | 177                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 80.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 105.0                                                                               | 55.0                                                                                |                                                                                     | 0.0                                                                                 | 35.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 2                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 60.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                     | 35.0                                                                                |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.97                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.96                                                                                | 1.00                                                                                | 0.99                                                                                |                                                                                     | 1.00                                                                                | 0.98                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.999                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                               |                                                                                     | 0.861                                                                               |                                                                                     |                                                                                     | 0.851                                                                               |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1768                                                                              | 3532                                                                              | 0                                                                                 | 1701                                                                              | 3537                                                                              | 1582                                                                                | 1406                                                                                | 1581                                                                                | 0                                                                                   | 3431                                                                                | 1556                                                                                |
| Flt Permitted              |                                                                                   | 0.141                                                                             |                                                                                   |                                                                                   | 0.262                                                                             |                                                                                   |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 262                                                                               | 3532                                                                              | 0                                                                                 | 469                                                                               | 3537                                                                              | 1524                                                                                | 1400                                                                                | 1581                                                                                | 0                                                                                   | 3415                                                                                | 1556                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   | 236                                                                                 |                                                                                     | 26                                                                                  |                                                                                     |                                                                                     | 159                                                                                 |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |
| Link Distance (m)          |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                     |                                                                                     | 289.2                                                                               |                                                                                     |                                                                                     | 233.8                                                                               |
| Travel Time (s)            |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                     |                                                                                     | 20.8                                                                                |                                                                                     |                                                                                     | 16.8                                                                                |
| Confl. Peds. (#/hr)        |                                                                                   | 7                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 7                                                                                   | 4                                                                                   |                                                                                     | 2                                                                                   | 2                                                                                   |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 5%                                                                                | 1%                                                                                | 1%                                                                                  | 27%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 1                                                                                 | 91                                                                                | 948                                                                               | 6                                                                                 | 21                                                                                | 1180                                                                              | 236                                                                                 | 12                                                                                  | 2                                                                                   | 26                                                                                  | 197                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 92                                                                                | 954                                                                               | 0                                                                                 | 21                                                                                | 1180                                                                              | 236                                                                                 | 12                                                                                  | 28                                                                                  | 0                                                                                   | 197                                                                                 | 160                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | R NA                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                               | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | pm+pt                                                                             | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                | Perm                                                                                | Prot                                                                                | NA                                                                                  |                                                                                     | Prot                                                                                | NA                                                                                  |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |
| Permitted Phases           | 2                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 | 6                                                                                   | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



|                            |      |
|----------------------------|------|
| Lane Group                 | SBR  |
| Lane Configurations        |      |
| Traffic Volume (vph)       | 143  |
| Future Volume (vph)        | 143  |
| Ideal Flow (vphpl)         | 1800 |
| Storage Length (m)         | 0.0  |
| Storage Lanes              | 0    |
| Taper Length (m)           |      |
| Lane Util. Factor          | 1.00 |
| Ped Bike Factor            |      |
| Frt                        |      |
| Flt Protected              |      |
| Satd. Flow (prot)          | 0    |
| Flt Permitted              |      |
| Satd. Flow (perm)          | 0    |
| Right Turn on Red          | Yes  |
| Satd. Flow (RTOR)          |      |
| Link Speed (k/h)           |      |
| Link Distance (m)          |      |
| Travel Time (s)            |      |
| Confl. Peds. (#/hr)        | 4    |
| Peak Hour Factor           | 0.90 |
| Heavy Vehicles (%)         | 1%   |
| Adj. Flow (vph)            | 159  |
| Shared Lane Traffic (%)    |      |
| Lane Group Flow (vph)      | 0    |
| Enter Blocked Intersection | No   |
| Lane Alignment             | R NA |
| Median Width(m)            |      |
| Link Offset(m)             |      |
| Crosswalk Width(m)         |      |
| Two way Left Turn Lane     |      |
| Headway Factor             | 1.01 |
| Turning Speed (k/h)        | 14   |
| Number of Detectors        |      |
| Detector Template          |      |
| Leading Detector (m)       |      |
| Trailing Detector (m)      |      |
| Detector 1 Position(m)     |      |
| Detector 1 Size(m)         |      |
| Detector 1 Type            |      |
| Detector 1 Channel         |      |
| Detector 1 Extend (s)      |      |
| Detector 1 Queue (s)       |      |
| Detector 1 Delay (s)       |      |
| Detector 2 Position(m)     |      |
| Detector 2 Size(m)         |      |
| Detector 2 Type            |      |
| Detector 2 Channel         |      |
| Detector 2 Extend (s)      |      |
| Turn Type                  |      |
| Protected Phases           |      |
| Permitted Phases           |      |
| Detector Phase             |      |
| Switch Phase               |      |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 10.0                                                                              | 10.0                                                                               | 5.0                                                                                 | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 10.0                                                                                |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 31.3                                                                              |                                                                                   | 11.1                                                                              | 31.3                                                                              | 31.3                                                                               | 11.5                                                                                | 31.5                                                                                |                                                                                     | 11.5                                                                                | 31.5                                                                                |
| Total Split (s)         | 17.0                                                                              | 17.0                                                                              | 43.0                                                                              |                                                                                   | 17.0                                                                              | 43.0                                                                              | 43.0                                                                               | 28.0                                                                                | 32.0                                                                                |                                                                                     | 28.0                                                                                | 32.0                                                                                |
| Total Split (%)         | 14.2%                                                                             | 14.2%                                                                             | 35.8%                                                                             |                                                                                   | 14.2%                                                                             | 35.8%                                                                             | 35.8%                                                                              | 23.3%                                                                               | 26.7%                                                                               |                                                                                     | 23.3%                                                                               | 26.7%                                                                               |
| Maximum Green (s)       | 10.9                                                                              | 10.9                                                                              | 36.7                                                                              |                                                                                   | 10.9                                                                              | 36.7                                                                              | 36.7                                                                               | 21.5                                                                                | 25.5                                                                                |                                                                                     | 21.5                                                                                | 25.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.3                                                                                 | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.6                                                                               |                                                                                   | 2.4                                                                               | 2.6                                                                               | 2.6                                                                                | 3.2                                                                                 | 3.2                                                                                 |                                                                                     | 3.2                                                                                 | 3.2                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.3                                                                               |                                                                                   | 6.1                                                                               | 6.3                                                                               | 6.3                                                                                | 6.5                                                                                 | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lag                                                                               | Lag                                                                                | Lag                                                                                 | Lead                                                                                |                                                                                     | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             | C-Max                                                                              | None                                                                                | None                                                                                |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                                |                                                                                     | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 18.0                                                                              | 18.0                                                                               |                                                                                     | 18.0                                                                                |                                                                                     |                                                                                     | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 7                                                                                 | 7                                                                                  |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |
| Act Effct Green (s)     |                                                                                   | 80.9                                                                              | 76.7                                                                              |                                                                                   | 74.2                                                                              | 67.8                                                                              | 67.8                                                                               | 9.4                                                                                 | 13.0                                                                                |                                                                                     | 12.4                                                                                | 16.9                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.67                                                                              | 0.64                                                                              |                                                                                   | 0.62                                                                              | 0.56                                                                              | 0.56                                                                               | 0.08                                                                                | 0.11                                                                                |                                                                                     | 0.10                                                                                | 0.14                                                                                |
| v/c Ratio               |                                                                                   | 0.33                                                                              | 0.42                                                                              |                                                                                   | 0.06                                                                              | 0.59                                                                              | 0.25                                                                               | 0.11                                                                                | 0.14                                                                                |                                                                                     | 0.55                                                                                | 0.45                                                                                |
| Control Delay           |                                                                                   | 16.4                                                                              | 18.2                                                                              |                                                                                   | 21.2                                                                              | 38.9                                                                              | 15.7                                                                               | 50.5                                                                                | 18.2                                                                                |                                                                                     | 57.0                                                                                | 11.0                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 16.4                                                                              | 18.2                                                                              |                                                                                   | 21.2                                                                              | 38.9                                                                              | 15.7                                                                               | 50.5                                                                                | 18.2                                                                                |                                                                                     | 57.0                                                                                | 11.0                                                                                |
| LOS                     |                                                                                   | B                                                                                 | B                                                                                 |                                                                                   | C                                                                                 | D                                                                                 | B                                                                                  | D                                                                                   | B                                                                                   |                                                                                     | E                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 34.8                                                                              |                                                                                    |                                                                                     | 27.8                                                                                |                                                                                     |                                                                                     | 36.4                                                                                |
| Approach LOS            |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                    |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | D                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 7.2                                                                               | 46.7                                                                              |                                                                                   | 2.6                                                                               | 125.1                                                                             | 17.2                                                                               | 2.5                                                                                 | 0.4                                                                                 |                                                                                     | 21.3                                                                                | 0.2                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 21.8                                                                              | 129.9                                                                             |                                                                                   | m5.1                                                                              | #166.2                                                                            | m33.4                                                                              | 7.7                                                                                 | 7.5                                                                                 |                                                                                     | 31.3                                                                                | 16.2                                                                                |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                    |                                                                                     | 265.2                                                                               |                                                                                     |                                                                                     | 209.8                                                                               |
| Turn Bay Length (m)     |                                                                                   | 80.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 105.0                                                                              | 55.0                                                                                |                                                                                     |                                                                                     | 35.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 315                                                                               | 2257                                                                              |                                                                                   | 420                                                                               | 1999                                                                              | 963                                                                                | 251                                                                                 | 356                                                                                 |                                                                                     | 614                                                                                 | 463                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.29                                                                              | 0.42                                                                              |                                                                                   | 0.05                                                                              | 0.59                                                                              | 0.25                                                                               | 0.05                                                                                | 0.08                                                                                |                                                                                     | 0.32                                                                                | 0.35                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 106 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 28.8

Intersection LOS: C

Intersection Capacity Utilization 64.7%

ICU Level of Service C

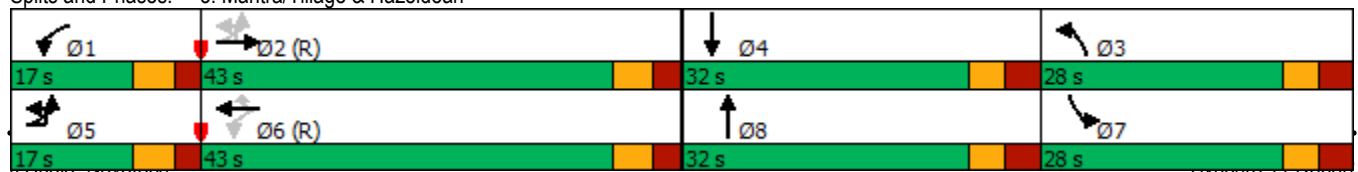
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: Mantra/Tillage & Hazeldean







| Lane Group              | SBR |
|-------------------------|-----|
| Minimum Initial (s)     |     |
| Minimum Split (s)       |     |
| Total Split (s)         |     |
| Total Split (%)         |     |
| Maximum Green (s)       |     |
| Yellow Time (s)         |     |
| All-Red Time (s)        |     |
| Lost Time Adjust (s)    |     |
| Total Lost Time (s)     |     |
| Lead/Lag                |     |
| Lead-Lag Optimize?      |     |
| Vehicle Extension (s)   |     |
| Recall Mode             |     |
| Walk Time (s)           |     |
| Flash Dont Walk (s)     |     |
| Pedestrian Calls (#/hr) |     |
| Act Effct Green (s)     |     |
| Actuated g/C Ratio      |     |
| v/c Ratio               |     |
| Control Delay           |     |
| Queue Delay             |     |
| Total Delay             |     |
| LOS                     |     |
| Approach Delay          |     |
| Approach LOS            |     |
| Queue Length 50th (m)   |     |
| Queue Length 95th (m)   |     |
| Internal Link Dist (m)  |     |
| Turn Bay Length (m)     |     |
| Base Capacity (vph)     |     |
| Starvation Cap Reductn  |     |
| Spillback Cap Reductn   |     |
| Storage Cap Reductn     |     |
| Reduced v/c Ratio       |     |
| Intersection Summary    |     |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2025 Existing Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 392                                                                               | 551                                                                               | 241                                                                               | 14                                                                                | 270                                                                               | 632                                                                                | 285                                                                                 | 274                                                                                 | 713                                                                                 | 186                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 2                                                                                 | 392                                                                               | 551                                                                               | 241                                                                               | 14                                                                                | 270                                                                               | 632                                                                                | 285                                                                                 | 274                                                                                 | 713                                                                                 | 186                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.95                                                                              |                                                                                   | 0.99                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 3364                                                                              | 3537                                                                              | 1551                                                                              | 0                                                                                 | 3399                                                                              | 3537                                                                               | 1551                                                                                | 3397                                                                                | 3468                                                                                | 1567                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 3359                                                                              | 3537                                                                              | 1481                                                                              | 0                                                                                 | 3355                                                                              | 3537                                                                               | 1525                                                                                | 3387                                                                                | 3468                                                                                | 1535                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 235                                                                               |                                                                                   |                                                                                   |                                                                                    | 192                                                                                 |                                                                                     |                                                                                     | 150                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 3                                                                                 |                                                                                   | 24                                                                                |                                                                                   | 24                                                                                |                                                                                    | 3                                                                                   | 5                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                               | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 3%                                                                                  | 2%                                                                                  | 3%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 436                                                                               | 612                                                                               | 268                                                                               | 16                                                                                | 300                                                                               | 702                                                                                | 317                                                                                 | 304                                                                                 | 792                                                                                 | 207                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 438                                                                               | 612                                                                               | 268                                                                               | 0                                                                                 | 316                                                                               | 702                                                                                | 317                                                                                 | 304                                                                                 | 792                                                                                 | 207                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2025 Existing Traffic

|                            |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                 | SBL                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations        |  |  |  |
| Traffic Volume (vph)       | 292                                                                               | 809                                                                               | 383                                                                               |
| Future Volume (vph)        | 292                                                                               | 809                                                                               | 383                                                                               |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)         | 155.0                                                                             |                                                                                   | 200.0                                                                             |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              |
| Ped Bike Factor            | 1.00                                                                              |                                                                                   | 0.98                                                                              |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)          | 3431                                                                              | 3502                                                                              | 1567                                                                              |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)          | 3416                                                                              | 3502                                                                              | 1537                                                                              |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 290                                                                               |
| Link Speed (k/h)           |                                                                                   | 70                                                                                |                                                                                   |
| Link Distance (m)          |                                                                                   | 316.2                                                                             |                                                                                   |
| Travel Time (s)            |                                                                                   | 16.3                                                                              |                                                                                   |
| Confl. Peds. (#/hr)        | 6                                                                                 |                                                                                   | 5                                                                                 |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 2%                                                                                |
| Adj. Flow (vph)            | 324                                                                               | 899                                                                               | 426                                                                               |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)      | 325                                                                               | 899                                                                               | 426                                                                               |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)            |                                                                                   | 10.0                                                                              |                                                                                   |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 | 1                                                                                 |
| Detector Template          | Left                                                                              | Thru                                                                              | Right                                                                             |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              |
| Protected Phases           | 1                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   | 6                                                                                 |
| Detector Phase             | 1                                                                                 | 6                                                                                 | 6                                                                                 |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2025 Existing Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                                | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 23.0                                                                              | 23.0                                                                              | 42.0                                                                              | 42.0                                                                              | 23.0                                                                              | 23.0                                                                              | 42.0                                                                                | 42.0                                                                                | 18.0                                                                                | 37.0                                                                                | 37.0                                                                                | 18.0                                                                                |
| Total Split (%)         | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                             | 35.0%                                                                             | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                               | 35.0%                                                                               | 15.0%                                                                               | 30.8%                                                                               | 30.8%                                                                               | 15.0%                                                                               |
| Maximum Green (s)       | 16.5                                                                              | 16.5                                                                              | 35.5                                                                              | 35.5                                                                              | 16.5                                                                              | 16.5                                                                              | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                | 11.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                 | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                                | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                                | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 24                                                                                | 24                                                                                |                                                                                   |                                                                                   | 3                                                                                   | 3                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 16.5                                                                              | 31.4                                                                              | 31.4                                                                              |                                                                                   | 15.2                                                                              | 30.0                                                                                | 30.0                                                                                | 14.3                                                                                | 32.3                                                                                | 32.3                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.26                                                                              | 0.26                                                                              |                                                                                   | 0.13                                                                              | 0.25                                                                                | 0.25                                                                                | 0.12                                                                                | 0.27                                                                                | 0.27                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.95                                                                              | 0.66                                                                              | 0.48                                                                              |                                                                                   | 0.74                                                                              | 0.79                                                                                | 0.60                                                                                | 0.75                                                                                | 0.85                                                                                | 0.40                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 82.1                                                                              | 49.0                                                                              | 19.6                                                                              |                                                                                   | 52.7                                                                              | 61.2                                                                                | 34.3                                                                                | 77.0                                                                                | 44.6                                                                                | 7.9                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.1                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 82.1                                                                              | 49.0                                                                              | 19.6                                                                              |                                                                                   | 52.7                                                                              | 61.2                                                                                | 34.3                                                                                | 77.0                                                                                | 44.6                                                                                | 8.0                                                                                 |                                                                                     |
| LOS                     |                                                                                   | F                                                                                 | D                                                                                 | B                                                                                 |                                                                                   | D                                                                                 | E                                                                                   | C                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 54.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 52.8                                                                                |                                                                                     |                                                                                     | 46.4                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 52.2                                                                              | 55.2                                                                              | 2.7                                                                               |                                                                                   | 34.3                                                                              | 85.8                                                                                | 38.5                                                                                | 29.4                                                                                | 88.2                                                                                | 12.8                                                                                |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | #79.9                                                                             | 76.6                                                                              | 49.2                                                                              |                                                                                   | 48.0                                                                              | 103.0                                                                               | 70.3                                                                                | #60.6                                                                               | #119.6                                                                              | 6.9                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                               |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                     | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 462                                                                               | 1046                                                                              | 603                                                                               |                                                                                   | 467                                                                               | 1046                                                                                | 586                                                                                 | 405                                                                                 | 933                                                                                 | 522                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 33                                                                                  |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.95                                                                              | 0.59                                                                              | 0.44                                                                              |                                                                                   | 0.68                                                                              | 0.67                                                                                | 0.54                                                                                | 0.75                                                                                | 0.85                                                                                | 0.42                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 50.8

Intersection LOS: D

Intersection Capacity Utilization 86.3%

ICU Level of Service E

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

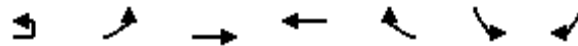
Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean

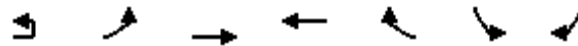
|                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |
| Ø1                                                                                  | Ø2 (R)                                                                              | Ø3                                                                                  | Ø4                                                                                    |
| 18 s                                                                                | 37 s                                                                                | 23 s                                                                                | 42 s                                                                                  |
|  |  |  |  |
| Ø5                                                                                  | Ø6 (R)                                                                              | Ø7                                                                                  | Ø8                                                                                    |
| 18 s                                                                                | 37 s                                                                                | 23 s                                                                                | 42 s                                                                                  |



| Lane Group              | SBL   | SBT    | SBR   |
|-------------------------|-------|--------|-------|
| Switch Phase            |       |        |       |
| Minimum Initial (s)     | 5.0   | 10.0   | 10.0  |
| Minimum Split (s)       | 11.5  | 35.5   | 35.5  |
| Total Split (s)         | 18.0  | 37.0   | 37.0  |
| Total Split (%)         | 15.0% | 30.8%  | 30.8% |
| Maximum Green (s)       | 11.5  | 30.5   | 30.5  |
| Yellow Time (s)         | 4.2   | 4.2    | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3    | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0    | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5    | 6.5   |
| Lead/Lag                | Lead  | Lag    | Lag   |
| Lead-Lag Optimize?      |       |        |       |
| Vehicle Extension (s)   | 3.0   | 3.0    | 3.0   |
| Recall Mode             | None  | C-Max  | C-Max |
| Walk Time (s)           |       | 7.0    | 7.0   |
| Flash Dont Walk (s)     |       | 22.0   | 22.0  |
| Pedestrian Calls (#/hr) |       | 5      | 5     |
| Act Effct Green (s)     | 15.2  | 33.1   | 33.1  |
| Actuated g/C Ratio      | 0.13  | 0.28   | 0.28  |
| v/c Ratio               | 0.75  | 0.93   | 0.67  |
| Control Delay           | 67.8  | 57.9   | 20.5  |
| Queue Delay             | 0.1   | 0.0    | 0.0   |
| Total Delay             | 67.9  | 57.9   | 20.5  |
| LOS                     | E     | E      | C     |
| Approach Delay          |       | 50.2   |       |
| Approach LOS            |       | D      |       |
| Queue Length 50th (m)   | 38.7  | ~85.9  | 15.0  |
| Queue Length 95th (m)   | #65.7 | #141.1 | 74.9  |
| Internal Link Dist (m)  |       | 292.2  |       |
| Turn Bay Length (m)     | 155.0 |        | 200.0 |
| Base Capacity (vph)     | 433   | 967    | 634   |
| Starvation Cap Reductn  | 0     | 0      | 0     |
| Spillback Cap Reductn   | 2     | 0      | 0     |
| Storage Cap Reductn     | 0     | 0      | 0     |
| Reduced v/c Ratio       | 0.75  | 0.93   | 0.67  |
| Intersection Summary    |       |        |       |



| Lane Group                 | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 4     | 64    | 994   | 1290  | 48    | 94    | 82    |
| Future Volume (vph)        | 4     | 64    | 994   | 1290  | 48    | 94    | 82    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 35.0  |       |       | 0.0   | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       |       | 0     | 1     | 1     |
| Taper Length (m)           |       | 40.0  |       |       |       | 40.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  |
| Ped Bike Factor            |       | 1.00  |       | 1.00  |       | 0.99  | 0.97  |
| Frt                        |       |       |       | 0.995 |       |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1752  | 3537  | 3511  | 0     | 1768  | 1582  |
| Flt Permitted              |       | 0.143 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 263   | 3537  | 3511  | 0     | 1746  | 1533  |
| Right Turn on Red          |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 7     |       |       | 52    |
| Link Speed (k/h)           |       |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 157.6 | 314.8 |       | 401.6 |       |
| Travel Time (s)            |       |       | 9.5   | 18.9  |       | 28.9  |       |
| Confl. Peds. (#/hr)        |       | 17    |       |       | 17    | 10    | 15    |
| Peak Hour Factor           | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  | 0.90  |
| Heavy Vehicles (%)         | 1%    | 2%    | 1%    | 1%    | 1%    | 1%    | 1%    |
| Adj. Flow (vph)            | 4     | 71    | 1104  | 1433  | 53    | 104   | 91    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 75    | 1104  | 1486  | 0     | 104   | 91    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | L NA  | Left  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 8.0   | 4.0   |       | 4.0   |       |
| Link Offset(m)             |       |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 2     |       | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Thru  |       | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 10.0  |       | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 0.6   |       | 2.0   | 2.0   |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | NA    |       | Perm  | Perm  |
| Protected Phases           |       |       | 2     | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       |       |       | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     |       | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |



| Lane Group              | EBU   | EBL   | EBT   | WBT   | WBR | SBL   | SBR   |
|-------------------------|-------|-------|-------|-------|-----|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  | 10.0  | 10.0  |     | 10.0  | 10.0  |
| Minimum Split (s)       | 16.2  | 16.2  | 16.2  | 31.2  |     | 34.1  | 34.1  |
| Total Split (s)         | 86.0  | 86.0  | 86.0  | 86.0  |     | 34.0  | 34.0  |
| Total Split (%)         | 71.7% | 71.7% | 71.7% | 71.7% |     | 28.3% | 28.3% |
| Maximum Green (s)       | 79.8  | 79.8  | 79.8  | 79.8  |     | 27.9  | 27.9  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7   | 3.7   |     | 3.3   | 3.3   |
| All-Red Time (s)        | 2.5   | 2.5   | 2.5   | 2.5   |     | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.2   | 6.2   | 6.2   |     | 6.1   | 6.1   |
| Lead/Lag                |       |       |       |       |     |       |       |
| Lead-Lag Optimize?      |       |       |       |       |     |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max | C-Max | C-Max |     | None  | None  |
| Walk Time (s)           |       |       |       | 7.0   |     | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |       |       | 18.0  |     | 21.0  | 21.0  |
| Pedestrian Calls (#/hr) |       |       |       | 17    |     | 15    | 15    |
| Act Effct Green (s)     |       | 89.9  | 89.9  | 89.9  |     | 17.8  | 17.8  |
| Actuated g/C Ratio      |       | 0.75  | 0.75  | 0.75  |     | 0.15  | 0.15  |
| v/c Ratio               |       | 0.38  | 0.42  | 0.56  |     | 0.40  | 0.34  |
| Control Delay           |       | 22.8  | 13.7  | 8.7   |     | 46.2  | 20.7  |
| Queue Delay             |       | 0.0   | 0.9   | 0.0   |     | 0.0   | 0.0   |
| Total Delay             |       | 22.8  | 14.6  | 8.7   |     | 46.2  | 20.7  |
| LOS                     |       | C     | B     | A     |     | D     | C     |
| Approach Delay          |       |       | 15.1  | 8.7   |     | 34.3  |       |
| Approach LOS            |       |       | B     | A     |     | C     |       |
| Queue Length 50th (m)   |       | 8.3   | 69.7  | 49.4  |     | 22.3  | 8.5   |
| Queue Length 95th (m)   |       | m27.1 | 133.2 | 108.5 |     | m29.2 | m15.8 |
| Internal Link Dist (m)  |       |       | 133.6 | 290.8 |     | 377.6 |       |
| Turn Bay Length (m)     |       | 35.0  |       |       |     | 30.0  |       |
| Base Capacity (vph)     |       | 197   | 2651  | 2633  |     | 405   | 396   |
| Starvation Cap Reductn  |       | 0     | 1175  | 0     |     | 0     | 0     |
| Spillback Cap Reductn   |       | 0     | 0     | 0     |     | 0     | 0     |
| Storage Cap Reductn     |       | 0     | 0     | 0     |     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.38  | 0.75  | 0.56  |     | 0.26  | 0.23  |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 10 (8%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 13.1

Intersection LOS: B

Intersection Capacity Utilization 77.3%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Hazeldean & Edgewater



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 176                                                                               | 2                                                                                  | 1195                                                                                | 63                                                                                  | 1                                                                                   | 155                                                                                 | 1470                                                                                |
| Future Volume (vph)        | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 176                                                                               | 2                                                                                  | 1195                                                                                | 63                                                                                  | 1                                                                                   | 155                                                                                 | 1470                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 1.00                                                                              | 0.98                                                                              |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                    | 0.992                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1669                                                                              | 1561                                                                              | 0                                                                                 | 1768                                                                              | 1560                                                                              | 0                                                                                 | 1768                                                                               | 3476                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3537                                                                                |
| Flt Permitted              | 0.346                                                                             |                                                                                   |                                                                                   | 0.752                                                                             |                                                                                   |                                                                                   | 0.120                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.117                                                                               |                                                                                     |
| Satd. Flow (perm)          | 605                                                                               | 1561                                                                              | 0                                                                                 | 1398                                                                              | 1560                                                                              | 0                                                                                 | 223                                                                                | 3476                                                                                | 0                                                                                   | 0                                                                                   | 214                                                                                 | 3537                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 129                                                                               |                                                                                   |                                                                                   | 146                                                                               |                                                                                   |                                                                                    | 7                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                    | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                    | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 5                                                                                 | 3                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                               | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 7%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 3%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 17                                                                                | 0                                                                                 | 9                                                                                 | 46                                                                                | 4                                                                                 | 196                                                                               | 2                                                                                  | 1328                                                                                | 70                                                                                  | 1                                                                                   | 172                                                                                 | 1633                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 17                                                                                | 9                                                                                 | 0                                                                                 | 46                                                                                | 200                                                                               | 0                                                                                 | 2                                                                                  | 1398                                                                                | 0                                                                                   | 0                                                                                   | 173                                                                                 | 1633                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                    | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 29    |
| Future Volume (vph)        | 29    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1551  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1511  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 92    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 3     |
| Peak Hour Factor           | 0.90  |
| Heavy Vehicles (%)         | 3%    |
| Adj. Flow (vph)            | 32    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 32    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

| Lane Group              | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBU   | SBL   | SBT   |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  |     | 10.0  | 10.0  |     | 5.0   | 10.0  |     | 5.0   | 5.0   | 10.0  |
| Minimum Split (s)       | 36.5  | 36.5  |     | 36.5  | 36.5  |     | 11.6  | 34.5  |     | 11.6  | 11.6  | 34.5  |
| Total Split (s)         | 37.0  | 37.0  |     | 37.0  | 37.0  |     | 14.0  | 69.0  |     | 14.0  | 14.0  | 69.0  |
| Total Split (%)         | 30.8% | 30.8% |     | 30.8% | 30.8% |     | 11.7% | 57.5% |     | 11.7% | 11.7% | 57.5% |
| Maximum Green (s)       | 30.5  | 30.5  |     | 30.5  | 30.5  |     | 7.4   | 62.5  |     | 7.4   | 7.4   | 62.5  |
| Yellow Time (s)         | 3.3   | 3.3   |     | 3.3   | 3.3   |     | 4.2   | 4.2   |     | 4.2   | 4.2   | 4.2   |
| All-Red Time (s)        | 3.2   | 3.2   |     | 3.2   | 3.2   |     | 2.4   | 2.3   |     | 2.4   | 2.4   | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5   |     | 6.5   | 6.5   |     | 6.6   | 6.5   |     |       | 6.6   | 6.5   |
| Lead/Lag                |       |       |     |       |       |     | Lead  | Lag   |     | Lead  | Lead  | Lag   |
| Lead-Lag Optimize?      |       |       |     |       |       |     |       |       |     |       |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |     | None  | None  |     | None  | C-Max |     | None  | None  | C-Max |
| Walk Time (s)           | 7.0   | 7.0   |     | 7.0   | 7.0   |     |       | 7.0   |     |       |       | 7.0   |
| Flash Dont Walk (s)     | 23.0  | 23.0  |     | 23.0  | 23.0  |     |       | 21.0  |     |       |       | 21.0  |
| Pedestrian Calls (#/hr) | 1     | 1     |     | 5     | 5     |     |       | 1     |     |       |       | 3     |
| Act Effct Green (s)     | 14.7  | 14.7  |     | 14.7  | 14.7  |     | 79.8  | 74.4  |     |       | 91.3  | 89.8  |
| Actuated g/C Ratio      | 0.12  | 0.12  |     | 0.12  | 0.12  |     | 0.66  | 0.62  |     |       | 0.76  | 0.75  |
| v/c Ratio               | 0.23  | 0.03  |     | 0.27  | 0.63  |     | 0.01  | 0.65  |     |       | 0.57  | 0.62  |
| Control Delay           | 51.0  | 0.1   |     | 45.5  | 23.0  |     | 5.0   | 8.9   |     |       | 16.1  | 11.0  |
| Queue Delay             | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |       | 0.0   | 0.0   |
| Total Delay             | 51.0  | 0.1   |     | 45.5  | 23.0  |     | 5.0   | 8.9   |     |       | 16.1  | 11.0  |
| LOS                     | D     | A     |     | D     | C     |     | A     | A     |     |       | B     | B     |
| Approach Delay          |       | 33.4  |     |       | 27.2  |     |       | 8.9   |     |       |       | 11.3  |
| Approach LOS            |       | C     |     |       | C     |     |       | A     |     |       |       | B     |
| Queue Length 50th (m)   | 3.5   | 0.0   |     | 10.0  | 14.4  |     | 0.0   | 43.1  |     |       | 6.4   | 52.8  |
| Queue Length 95th (m)   | 8.7   | 0.0   |     | m17.8 | 32.5  |     | m0.2  | 32.0  |     |       | #30.4 | 184.3 |
| Internal Link Dist (m)  |       | 193.1 |     |       | 258.1 |     |       | 229.3 |     |       |       | 336.0 |
| Turn Bay Length (m)     |       |       |     | 65.0  |       |     |       |       |     |       | 55.0  |       |
| Base Capacity (vph)     | 153   | 492   |     | 355   | 505   |     | 247   | 2157  |     |       | 306   | 2648  |
| Starvation Cap Reductn  | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.11  | 0.02  |     | 0.13  | 0.40  |     | 0.01  | 0.65  |     |       | 0.57  | 0.62  |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 46 (38%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 11.6

Intersection LOS: B

Intersection Capacity Utilization 77.6%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater





|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 69.0  |
| Total Split (%)         | 57.5% |
| Maximum Green (s)       | 62.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                | Lag   |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 3     |
| Act Effct Green (s)     | 89.8  |
| Actuated g/C Ratio      | 0.75  |
| v/c Ratio               | 0.03  |
| Control Delay           | 0.0   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.0   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.0   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1154  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.03  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBU                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |  |                                                                                     |                                                                                     |  |
| Traffic Volume (vph)       | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1089                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Future Volume (vph)        | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1089                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 35.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 |                                                                                    | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (m)           | 25.0                                                                              |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                    | 10.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                               | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                    |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 1768                                                                              | 1582                                                                              | 0                                                                                 | 1488                                                                              | 1582                                                                              | 0                                                                                 | 0                                                                                  | 1768                                                                                | 3457                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                |
| Flt Permitted              | 0.756                                                                             |                                                                                   |                                                                                   | 0.738                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.133                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.209                                                                               |
| Satd. Flow (perm)          | 1407                                                                              | 1582                                                                              | 0                                                                                 | 1156                                                                              | 1582                                                                              | 0                                                                                 | 0                                                                                  | 248                                                                                 | 3457                                                                                | 0                                                                                   | 0                                                                                   | 389                                                                                 |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 147                                                                               |                                                                                   |                                                                                   | 157                                                                               |                                                                                   |                                                                                    |                                                                                     | 3                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   | 207.5                                                                             |                                                                                   |                                                                                   | 88.7                                                                              |                                                                                   |                                                                                    |                                                                                     | 316.2                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   | 14.9                                                                              |                                                                                   |                                                                                   | 10.6                                                                              |                                                                                   |                                                                                    |                                                                                     | 16.3                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     | 4                                                                                   |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                               | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 20%                                                                               | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 3%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 29                                                                                | 6                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 40                                                                                  | 1210                                                                                | 27                                                                                  | 1                                                                                   | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 29                                                                                | 0                                                                                 | 6                                                                                 | 3                                                                                 | 0                                                                                 | 0                                                                                  | 43                                                                                  | 1237                                                                                | 0                                                                                   | 0                                                                                   | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                               | Left                                                                                | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 12.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                 | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



| Lane Group                 | SBT   | SBR  |
|----------------------------|-------|------|
| Lane Configurations        | ↑↑    |      |
| Traffic Volume (vph)       | 1326  | 1    |
| Future Volume (vph)        | 1326  | 1    |
| Ideal Flow (vphpl)         | 1800  | 1800 |
| Storage Length (m)         |       | 0.0  |
| Storage Lanes              |       | 0    |
| Taper Length (m)           |       |      |
| Lane Util. Factor          | 0.95  | 0.95 |
| Ped Bike Factor            |       |      |
| Frt                        |       |      |
| Flt Protected              |       |      |
| Satd. Flow (prot)          | 3537  | 0    |
| Flt Permitted              |       |      |
| Satd. Flow (perm)          | 3537  | 0    |
| Right Turn on Red          |       | Yes  |
| Satd. Flow (RTOR)          |       |      |
| Link Speed (k/h)           | 70    |      |
| Link Distance (m)          | 253.3 |      |
| Travel Time (s)            | 13.0  |      |
| Confl. Peds. (#/hr)        |       |      |
| Peak Hour Factor           | 0.90  | 0.90 |
| Heavy Vehicles (%)         | 1%    | 1%   |
| Adj. Flow (vph)            | 1473  | 1    |
| Shared Lane Traffic (%)    |       |      |
| Lane Group Flow (vph)      | 1474  | 0    |
| Enter Blocked Intersection | No    | No   |
| Lane Alignment             | Left  | R NA |
| Median Width(m)            | 12.0  |      |
| Link Offset(m)             | 0.0   |      |
| Crosswalk Width(m)         | 5.0   |      |
| Two way Left Turn Lane     |       |      |
| Headway Factor             | 1.01  | 1.01 |
| Turning Speed (k/h)        |       | 14   |
| Number of Detectors        | 2     |      |
| Detector Template          | Thru  |      |
| Leading Detector (m)       | 10.0  |      |
| Trailing Detector (m)      | 0.0   |      |
| Detector 1 Position(m)     | 0.0   |      |
| Detector 1 Size(m)         | 0.6   |      |
| Detector 1 Type            | CI+Ex |      |
| Detector 1 Channel         |       |      |
| Detector 1 Extend (s)      | 0.0   |      |
| Detector 1 Queue (s)       | 0.0   |      |
| Detector 1 Delay (s)       | 0.0   |      |
| Detector 2 Position(m)     | 9.4   |      |
| Detector 2 Size(m)         | 0.6   |      |
| Detector 2 Type            | CI+Ex |      |
| Detector 2 Channel         |       |      |
| Detector 2 Extend (s)      | 0.0   |      |
| Turn Type                  | NA    |      |
| Protected Phases           | 6     |      |
| Permitted Phases           |       |      |
| Detector Phase             | 6     |      |
| Switch Phase               |       |      |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBU                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 5.0                                                                                | 5.0                                                                                 | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.2                                                                              | 32.2                                                                              |                                                                                   | 11.5                                                                               | 11.5                                                                                | 32.5                                                                                |                                                                                     | 11.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                | 72.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                |
| Total Split (%)         | 27.5%                                                                             | 27.5%                                                                             |                                                                                   | 27.5%                                                                             | 27.5%                                                                             |                                                                                   | 12.5%                                                                              | 12.5%                                                                               | 60.0%                                                                               |                                                                                     | 12.5%                                                                               | 12.5%                                                                               |
| Maximum Green (s)       | 26.8                                                                              | 26.8                                                                              |                                                                                   | 26.8                                                                              | 26.8                                                                              |                                                                                   | 8.5                                                                                | 8.5                                                                                 | 65.5                                                                                |                                                                                     | 8.5                                                                                 | 8.5                                                                                 |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Total Lost Time (s)     | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.2                                                                               | 6.2                                                                               |                                                                                   |                                                                                    | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |                                                                                     | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lead                                                                                | Lag                                                                                 |                                                                                     | Lead                                                                                | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | None                                                                                | C-Max                                                                               |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 7.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Flash Dont Walk (s)     | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                              | 19.0                                                                              |                                                                                   |                                                                                    |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Pedestrian Calls (#/hr) | 1                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   |                                                                                    |                                                                                     | 4                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Act Effct Green (s)     | 13.2                                                                              | 13.2                                                                              |                                                                                   | 13.2                                                                              | 13.2                                                                              |                                                                                   |                                                                                    | 99.6                                                                                | 100.7                                                                               |                                                                                     |                                                                                     | 94.8                                                                                |
| Actuated g/C Ratio      | 0.11                                                                              | 0.11                                                                              |                                                                                   | 0.11                                                                              | 0.11                                                                              |                                                                                   |                                                                                    | 0.83                                                                                | 0.84                                                                                |                                                                                     |                                                                                     | 0.79                                                                                |
| v/c Ratio               | 0.02                                                                              | 0.10                                                                              |                                                                                   | 0.05                                                                              | 0.01                                                                              |                                                                                   |                                                                                    | 0.15                                                                                | 0.43                                                                                |                                                                                     |                                                                                     | 0.01                                                                                |
| Control Delay           | 43.0                                                                              | 0.6                                                                               |                                                                                   | 44.2                                                                              | 0.0                                                                               |                                                                                   |                                                                                    | 2.9                                                                                 | 2.5                                                                                 |                                                                                     |                                                                                     | 5.5                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Total Delay             | 43.0                                                                              | 0.6                                                                               |                                                                                   | 44.2                                                                              | 0.0                                                                               |                                                                                   |                                                                                    | 2.9                                                                                 | 2.5                                                                                 |                                                                                     |                                                                                     | 5.5                                                                                 |
| LOS                     | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | A                                                                                 |                                                                                   |                                                                                    | A                                                                                   | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |
| Approach Delay          |                                                                                   | 4.6                                                                               |                                                                                   |                                                                                   | 29.5                                                                              |                                                                                   |                                                                                    |                                                                                     | 2.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 50th (m)   | 0.6                                                                               | 0.0                                                                               |                                                                                   | 1.2                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 1.1                                                                                 | 17.5                                                                                |                                                                                     |                                                                                     | 0.1                                                                                 |
| Queue Length 95th (m)   | 2.9                                                                               | 0.0                                                                               |                                                                                   | 4.4                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | m2.0                                                                                | m26.0                                                                               |                                                                                     |                                                                                     | m0.4                                                                                |
| Internal Link Dist (m)  |                                                                                   | 183.5                                                                             |                                                                                   |                                                                                   | 64.7                                                                              |                                                                                   |                                                                                    |                                                                                     | 292.2                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Turn Bay Length (m)     | 35.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |
| Base Capacity (vph)     | 314                                                                               | 467                                                                               |                                                                                   | 258                                                                               | 475                                                                               |                                                                                   |                                                                                    | 313                                                                                 | 2902                                                                                |                                                                                     |                                                                                     | 412                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       | 0.01                                                                              | 0.06                                                                              |                                                                                   | 0.02                                                                              | 0.01                                                                              |                                                                                   |                                                                                    | 0.14                                                                                | 0.43                                                                                |                                                                                     |                                                                                     | 0.01                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 40 (33%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 4.6

Intersection LOS: A

Intersection Capacity Utilization 57.6%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Terry Fox & Tony Graham Rec





| Lane Group              | SBT   | SBR |
|-------------------------|-------|-----|
| Minimum Initial (s)     | 10.0  |     |
| Minimum Split (s)       | 32.5  |     |
| Total Split (s)         | 72.0  |     |
| Total Split (%)         | 60.0% |     |
| Maximum Green (s)       | 65.5  |     |
| Yellow Time (s)         | 4.2   |     |
| All-Red Time (s)        | 2.3   |     |
| Lost Time Adjust (s)    | 0.0   |     |
| Total Lost Time (s)     | 6.5   |     |
| Lead/Lag                | Lag   |     |
| Lead-Lag Optimize?      |       |     |
| Vehicle Extension (s)   | 3.0   |     |
| Recall Mode             | C-Max |     |
| Walk Time (s)           | 7.0   |     |
| Flash Dont Walk (s)     | 19.0  |     |
| Pedestrian Calls (#/hr) | 1     |     |
| Act Effct Green (s)     | 91.6  |     |
| Actuated g/C Ratio      | 0.76  |     |
| v/c Ratio               | 0.55  |     |
| Control Delay           | 6.3   |     |
| Queue Delay             | 0.0   |     |
| Total Delay             | 6.3   |     |
| LOS                     | A     |     |
| Approach Delay          | 6.3   |     |
| Approach LOS            | A     |     |
| Queue Length 50th (m)   | 28.7  |     |
| Queue Length 95th (m)   | 54.1  |     |
| Internal Link Dist (m)  | 229.3 |     |
| Turn Bay Length (m)     |       |     |
| Base Capacity (vph)     | 2700  |     |
| Starvation Cap Reductn  | 0     |     |
| Spillback Cap Reductn   | 0     |     |
| Storage Cap Reductn     | 0     |     |
| Reduced v/c Ratio       | 0.55  |     |
| Intersection Summary    |       |     |

8: Terry Fox & Sobey's  
PM Peak Hour

560 Hazeldean Road  
2025 Existing Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 885                                                                                 | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1206                                                                                |
| Future Volume (vph)        | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 885                                                                                 | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1206                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 10.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 30.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.91                                                                                | 0.91                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 1.00                                                                              | 0.99                                                                              |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.917                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.988                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.990                                                                               |
| Flt Protected              |                                                                                   | 0.984                                                                             |                                                                                   |                                                                                   | 0.953                                                                             |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1663                                                                              | 0                                                                                 | 0                                                                                 | 1774                                                                              | 1582                                                                              | 1768                                                                               | 5012                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3493                                                                                |
| Flt Permitted              |                                                                                   | 0.861                                                                             |                                                                                   |                                                                                   | 0.573                                                                             |                                                                                   | 0.147                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.246                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1455                                                                              | 0                                                                                 | 0                                                                                 | 1064                                                                              | 1561                                                                              | 274                                                                                | 5012                                                                                | 0                                                                                   | 0                                                                                   | 458                                                                                 | 3493                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 114                                                                               |                                                                                    | 23                                                                                  |                                                                                     |                                                                                     |                                                                                     | 12                                                                                  |
| Link Speed (k/h)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 132.0                                                                             |                                                                                   |                                                                                   | 152.6                                                                             |                                                                                   |                                                                                    | 140.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 142.7                                                                               |
| Travel Time (s)            |                                                                                   | 15.8                                                                              |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                    | 7.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.3                                                                                 |
| Confl. Peds. (#/hr)        | 1                                                                                 |                                                                                   | 2                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                  |                                                                                     | 1                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                               | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 41                                                                                | 9                                                                                 | 80                                                                                | 87                                                                                | 2                                                                                 | 114                                                                               | 29                                                                                 | 983                                                                                 | 84                                                                                  | 2                                                                                   | 128                                                                                 | 1340                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 130                                                                               | 0                                                                                 | 0                                                                                 | 89                                                                                | 114                                                                               | 29                                                                                 | 1067                                                                                | 0                                                                                   | 0                                                                                   | 130                                                                                 | 1431                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |



|                            |      |    |
|----------------------------|------|----|
| Lane Group                 | SBR  | Ø9 |
| Lane Configurations        |      |    |
| Traffic Volume (vph)       | 82   |    |
| Future Volume (vph)        | 82   |    |
| Ideal Flow (vphpl)         | 1800 |    |
| Storage Length (m)         | 0.0  |    |
| Storage Lanes              | 0    |    |
| Taper Length (m)           |      |    |
| Lane Util. Factor          | 0.95 |    |
| Ped Bike Factor            |      |    |
| Frt                        |      |    |
| Flt Protected              |      |    |
| Satd. Flow (prot)          | 0    |    |
| Flt Permitted              |      |    |
| Satd. Flow (perm)          | 0    |    |
| Right Turn on Red          | Yes  |    |
| Satd. Flow (RTOR)          |      |    |
| Link Speed (k/h)           |      |    |
| Link Distance (m)          |      |    |
| Travel Time (s)            |      |    |
| Confl. Peds. (#/hr)        | 6    |    |
| Confl. Bikes (#/hr)        | 1    |    |
| Peak Hour Factor           | 0.90 |    |
| Heavy Vehicles (%)         | 1%   |    |
| Adj. Flow (vph)            | 91   |    |
| Shared Lane Traffic (%)    |      |    |
| Lane Group Flow (vph)      | 0    |    |
| Enter Blocked Intersection | No   |    |
| Lane Alignment             | R NA |    |
| Median Width(m)            |      |    |
| Link Offset(m)             |      |    |
| Crosswalk Width(m)         |      |    |
| Two way Left Turn Lane     |      |    |
| Headway Factor             | 1.01 |    |
| Turning Speed (k/h)        | 14   |    |
| Number of Detectors        |      |    |
| Detector Template          |      |    |
| Leading Detector (m)       |      |    |
| Trailing Detector (m)      |      |    |
| Detector 1 Position(m)     |      |    |
| Detector 1 Size(m)         |      |    |
| Detector 1 Type            |      |    |
| Detector 1 Channel         |      |    |
| Detector 1 Extend (s)      |      |    |
| Detector 1 Queue (s)       |      |    |
| Detector 1 Delay (s)       |      |    |
| Detector 2 Position(m)     |      |    |
| Detector 2 Size(m)         |      |    |
| Detector 2 Type            |      |    |
| Detector 2 Channel         |      |    |
| Detector 2 Extend (s)      |      |    |
| Turn Type                  |      |    |
| Protected Phases           | 9    |    |
| Permitted Phases           |      |    |
| Detector Phase             |      |    |

8: Terry Fox & Sobey's  
PM Peak Hour

560 Hazeldean Road  
2025 Existing Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 26.0                                                                               | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                | 26.0                                                                                |
| Total Split (s)         | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 84.0                                                                               | 84.0                                                                                |                                                                                     | 84.0                                                                                | 84.0                                                                                | 84.0                                                                                |
| Total Split (%)         | 25.8%                                                                             | 25.8%                                                                             |                                                                                   | 25.8%                                                                             | 25.8%                                                                             | 25.8%                                                                             | 70.0%                                                                              | 70.0%                                                                               |                                                                                     | 70.0%                                                                               | 70.0%                                                                               | 70.0%                                                                               |
| Maximum Green (s)       | 24.0                                                                              | 24.0                                                                              |                                                                                   | 24.0                                                                              | 24.0                                                                              | 24.0                                                                              | 78.0                                                                               | 78.0                                                                                |                                                                                     | 78.0                                                                                | 78.0                                                                                | 78.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 1.8                                                                                | 1.8                                                                                 |                                                                                     | 1.8                                                                                 | 1.8                                                                                 | 1.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               | 6.0                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 6.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 17.0                                                                              | 17.0                                                                              |                                                                                   | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              | 13.0                                                                               | 13.0                                                                                |                                                                                     | 13.0                                                                                | 13.0                                                                                | 13.0                                                                                |
| Pedestrian Calls (#/hr) | 2                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                  | 1                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Act Effct Green (s)     |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 15.6                                                                              | 15.6                                                                              | 86.4                                                                               | 86.4                                                                                |                                                                                     |                                                                                     | 86.4                                                                                | 86.4                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.13                                                                              |                                                                                   |                                                                                   | 0.13                                                                              | 0.13                                                                              | 0.72                                                                               | 0.72                                                                                |                                                                                     |                                                                                     | 0.72                                                                                | 0.72                                                                                |
| v/c Ratio               |                                                                                   | 0.54                                                                              |                                                                                   |                                                                                   | 0.65                                                                              | 0.38                                                                              | 0.15                                                                               | 0.30                                                                                |                                                                                     |                                                                                     | 0.40                                                                                | 0.57                                                                                |
| Control Delay           |                                                                                   | 34.0                                                                              |                                                                                   |                                                                                   | 69.7                                                                              | 11.4                                                                              | 7.3                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 5.3                                                                                 | 3.6                                                                                 |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.3                                                                                 |
| Total Delay             |                                                                                   | 34.0                                                                              |                                                                                   |                                                                                   | 69.7                                                                              | 11.4                                                                              | 7.3                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 5.3                                                                                 | 3.9                                                                                 |
| LOS                     |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 | B                                                                                 | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 34.0                                                                              |                                                                                   |                                                                                   | 36.9                                                                              |                                                                                   |                                                                                    | 6.3                                                                                 |                                                                                     |                                                                                     |                                                                                     | 4.0                                                                                 |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 14.2                                                                              |                                                                                   |                                                                                   | 18.8                                                                              | 0.0                                                                               | 2.2                                                                                | 33.8                                                                                |                                                                                     |                                                                                     | 2.6                                                                                 | 15.2                                                                                |
| Queue Length 95th (m)   |                                                                                   | 29.9                                                                              |                                                                                   |                                                                                   | 32.3                                                                              | 13.8                                                                              | 7.1                                                                                | 39.7                                                                                |                                                                                     |                                                                                     | m5.0                                                                                | m24.1                                                                               |
| Internal Link Dist (m)  |                                                                                   | 108.0                                                                             |                                                                                   |                                                                                   | 128.6                                                                             |                                                                                   |                                                                                    | 116.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 118.7                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 339                                                                               |                                                                                   |                                                                                   | 212                                                                               | 403                                                                               | 197                                                                                | 3616                                                                                |                                                                                     |                                                                                     | 329                                                                                 | 2519                                                                                |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 424                                                                                 |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.38                                                                              |                                                                                   |                                                                                   | 0.42                                                                              | 0.28                                                                              | 0.15                                                                               | 0.30                                                                                |                                                                                     |                                                                                     | 0.40                                                                                | 0.68                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 22 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 8.4

Intersection LOS: A

Intersection Capacity Utilization 76.6%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Terry Fox & Sobey's





| Lane Group              | SBR | Ø9 |
|-------------------------|-----|----|
| Switch Phase            |     |    |
| Minimum Initial (s)     | 3.0 |    |
| Minimum Split (s)       | 5.0 |    |
| Total Split (s)         | 5.0 |    |
| Total Split (%)         | 4%  |    |
| Maximum Green (s)       | 3.0 |    |
| Yellow Time (s)         | 2.0 |    |
| All-Red Time (s)        | 0.0 |    |
| Lost Time Adjust (s)    |     |    |
| Total Lost Time (s)     |     |    |
| Lead/Lag                |     |    |
| Lead-Lag Optimize?      |     |    |
| Vehicle Extension (s)   | 3.0 |    |
| Recall Mode             | Max |    |
| Walk Time (s)           |     |    |
| Flash Dont Walk (s)     |     |    |
| Pedestrian Calls (#/hr) |     |    |
| Act Effct Green (s)     |     |    |
| Actuated g/C Ratio      |     |    |
| v/c Ratio               |     |    |
| Control Delay           |     |    |
| Queue Delay             |     |    |
| Total Delay             |     |    |
| LOS                     |     |    |
| Approach Delay          |     |    |
| Approach LOS            |     |    |
| Queue Length 50th (m)   |     |    |
| Queue Length 95th (m)   |     |    |
| Internal Link Dist (m)  |     |    |
| Turn Bay Length (m)     |     |    |
| Base Capacity (vph)     |     |    |
| Starvation Cap Reductn  |     |    |
| Spillback Cap Reductn   |     |    |
| Storage Cap Reductn     |     |    |
| Reduced v/c Ratio       |     |    |
| Intersection Summary    |     |    |

9: Terry Fox & Halkirk/Winchester  
PM Peak Hour

560 Hazeldean Road  
2025 Existing Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                 | 879                                                                                 | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1171                                                                                |
| Future Volume (vph)        | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                 | 879                                                                                 | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1171                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 15.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 65.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 120.0                                                                               |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 20.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.99                                                                              |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 0.99                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.925                                                                             |                                                                                   |                                                                                   | 0.872                                                                             |                                                                                   |                                                                                    | 0.994                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1701                                                                              | 1703                                                                              | 0                                                                                 | 1768                                                                              | 1623                                                                              | 0                                                                                 | 1768                                                                               | 3508                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3537                                                                                |
| Flt Permitted              | 0.581                                                                             |                                                                                   |                                                                                   | 0.747                                                                             |                                                                                   |                                                                                   | 0.189                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.267                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1040                                                                              | 1703                                                                              | 0                                                                                 | 1377                                                                              | 1623                                                                              | 0                                                                                 | 351                                                                                | 3508                                                                                | 0                                                                                   | 0                                                                                   | 494                                                                                 | 3537                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 108                                                                               |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 40                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 65.4                                                                              |                                                                                   |                                                                                   | 381.2                                                                             |                                                                                   |                                                                                    | 479.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 200.7                                                                               |
| Travel Time (s)            |                                                                                   | 4.7                                                                               |                                                                                   |                                                                                   | 34.3                                                                              |                                                                                   |                                                                                    | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     | 10.3                                                                                |
| Confl. Peds. (#/hr)        |                                                                                   |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   |                                                                                   | 6                                                                                  |                                                                                     | 14                                                                                  |                                                                                     | 14                                                                                  |                                                                                     |
| Peak Hour Factor           | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                              | 0.90                                                                               | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                | 0.90                                                                                |
| Heavy Vehicles (%)         | 5%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 26                                                                                | 8                                                                                 | 8                                                                                 | 53                                                                                | 19                                                                                | 108                                                                               | 13                                                                                 | 977                                                                                 | 38                                                                                  | 2                                                                                   | 154                                                                                 | 1301                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 26                                                                                | 16                                                                                | 0                                                                                 | 53                                                                                | 127                                                                               | 0                                                                                 | 13                                                                                 | 1015                                                                                | 0                                                                                   | 0                                                                                   | 156                                                                                 | 1301                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 44    |
| Future Volume (vph)        | 44    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 55.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.96  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1525  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 49    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 6     |
| Peak Hour Factor           | 0.90  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 49    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 49    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 28.3                                                                               | 28.3                                                                                |                                                                                     | 28.3                                                                                | 28.3                                                                                | 28.3                                                                                |
| Total Split (s)         | 38.0                                                                              | 38.0                                                                              |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 82.0                                                                               | 82.0                                                                                |                                                                                     | 82.0                                                                                | 82.0                                                                                | 82.0                                                                                |
| Total Split (%)         | 31.7%                                                                             | 31.7%                                                                             |                                                                                   | 31.7%                                                                             | 31.7%                                                                             |                                                                                   | 68.3%                                                                              | 68.3%                                                                               |                                                                                     | 68.3%                                                                               | 68.3%                                                                               | 68.3%                                                                               |
| Maximum Green (s)       | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 75.7                                                                               | 75.7                                                                                |                                                                                     | 75.7                                                                                | 75.7                                                                                | 75.7                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.1                                                                                | 2.1                                                                                 |                                                                                     | 2.1                                                                                 | 2.1                                                                                 | 2.1                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.3                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 15.0                                                                                |
| Pedestrian Calls (#/hr) | 8                                                                                 | 8                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 |                                                                                   | 14                                                                                 | 14                                                                                  |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Act Effct Green (s)     | 14.4                                                                              | 14.4                                                                              |                                                                                   | 14.4                                                                              | 14.4                                                                              |                                                                                   | 93.3                                                                               | 93.3                                                                                |                                                                                     |                                                                                     | 93.3                                                                                | 93.3                                                                                |
| Actuated g/C Ratio      | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.78                                                                               | 0.78                                                                                |                                                                                     |                                                                                     | 0.78                                                                                | 0.78                                                                                |
| v/c Ratio               | 0.21                                                                              | 0.08                                                                              |                                                                                   | 0.32                                                                              | 0.44                                                                              |                                                                                   | 0.05                                                                               | 0.37                                                                                |                                                                                     |                                                                                     | 0.41                                                                                | 0.47                                                                                |
| Control Delay           | 48.2                                                                              | 29.3                                                                              |                                                                                   | 50.9                                                                              | 15.9                                                                              |                                                                                   | 5.7                                                                                | 5.4                                                                                 |                                                                                     |                                                                                     | 15.3                                                                                | 11.6                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 48.2                                                                              | 29.3                                                                              |                                                                                   | 50.9                                                                              | 15.9                                                                              |                                                                                   | 5.7                                                                                | 5.4                                                                                 |                                                                                     |                                                                                     | 15.3                                                                                | 11.6                                                                                |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | B                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 41.0                                                                              |                                                                                   |                                                                                   | 26.3                                                                              |                                                                                   |                                                                                    | 5.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 11.8                                                                                |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 5.4                                                                               | 1.6                                                                               |                                                                                   | 11.2                                                                              | 3.9                                                                               |                                                                                   | 0.4                                                                                | 23.6                                                                                |                                                                                     |                                                                                     | 18.7                                                                                | 83.4                                                                                |
| Queue Length 95th (m)   | 11.3                                                                              | 6.5                                                                               |                                                                                   | 18.9                                                                              | 17.0                                                                              |                                                                                   | 3.3                                                                                | 65.0                                                                                |                                                                                     |                                                                                     | 36.8                                                                                | 110.5                                                                               |
| Internal Link Dist (m)  |                                                                                   | 41.4                                                                              |                                                                                   |                                                                                   | 357.2                                                                             |                                                                                   |                                                                                    | 455.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 176.7                                                                               |
| Turn Bay Length (m)     | 15.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 120.0                                                                               |                                                                                     |
| Base Capacity (vph)     | 277                                                                               | 460                                                                               |                                                                                   | 367                                                                               | 512                                                                               |                                                                                   | 272                                                                                | 2730                                                                                |                                                                                     |                                                                                     | 384                                                                                 | 2751                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.09                                                                              | 0.03                                                                              |                                                                                   | 0.14                                                                              | 0.25                                                                              |                                                                                   | 0.05                                                                               | 0.37                                                                                |                                                                                     |                                                                                     | 0.41                                                                                | 0.47                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 115 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 10.8

Intersection LOS: B

Intersection Capacity Utilization 70.2%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Terry Fox & Halkirk/Winchester



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 28.3  |
| Total Split (s)         | 82.0  |
| Total Split (%)         | 68.3% |
| Maximum Green (s)       | 75.7  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.1   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.3   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 15.0  |
| Pedestrian Calls (#/hr) | 6     |
| Act Effct Green (s)     | 93.3  |
| Actuated g/C Ratio      | 0.78  |
| v/c Ratio               | 0.04  |
| Control Delay           | 5.5   |
| Queue Delay             | 0.0   |
| Total Delay             | 5.5   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 1.3   |
| Queue Length 95th (m)   | m5.4  |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 55.0  |
| Base Capacity (vph)     | 1196  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.04  |
| Intersection Summary    |       |

## **APPENDIX J**

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### Background Synchro Analysis



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 3                                                                                 | 320                                                                               | 1019                                                                              | 10                                                                                | 1                                                                                 | 68                                                                                | 662                                                                                 | 47                                                                                  | 19                                                                                  | 442                                                                                 | 154                                                                                 | 20                                                                                  |
| Future Volume (vph)        | 3                                                                                 | 320                                                                               | 1019                                                                              | 10                                                                                | 1                                                                                 | 68                                                                                | 662                                                                                 | 47                                                                                  | 19                                                                                  | 442                                                                                 | 154                                                                                 | 20                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                     |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.999                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3399                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3370                                                                                | 1551                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3419                                                                              | 3399                                                                              | 0                                                                                 | 0                                                                                 | 3391                                                                              | 3370                                                                                | 1525                                                                                | 1745                                                                                | 3502                                                                                | 1540                                                                                | 3415                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 145                                                                                 |                                                                                     |                                                                                     | 154                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                               |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                                |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 5%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 6%                                                                                  | 3%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 320                                                                               | 1019                                                                              | 10                                                                                | 1                                                                                 | 68                                                                                | 662                                                                                 | 47                                                                                  | 19                                                                                  | 442                                                                                 | 154                                                                                 | 20                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 323                                                                               | 1029                                                                              | 0                                                                                 | 0                                                                                 | 69                                                                                | 662                                                                                 | 47                                                                                  | 19                                                                                  | 442                                                                                 | 154                                                                                 | 20                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 221   | 130   |
| Future Volume (vph)        | 221   | 130   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 60.0  |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3502  | 1582  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3502  | 1556  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 145   |
| Link Speed (k/h)           | 50    |       |
| Link Distance (m)          | 251.2 |       |
| Travel Time (s)            | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 2%    | 1%    |
| Adj. Flow (vph)            | 221   | 130   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 221   | 130   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | R NA  |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 4     |       |
| Permitted Phases           |       | 4     |
| Detector Phase             | 4     | 4     |
| Switch Phase               |       |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 49.0                                                                              |                                                                                   | 12.0                                                                              | 12.0                                                                              | 45.0                                                                                | 45.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 13.9%                                                                             | 13.9%                                                                             | 42.6%                                                                             |                                                                                   | 10.4%                                                                             | 10.4%                                                                             | 39.1%                                                                               | 39.1%                                                                               | 10.4%                                                                               | 36.5%                                                                               | 36.5%                                                                               | 10.4%                                                                               |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 42.9                                                                              |                                                                                   | 5.9                                                                               | 5.9                                                                               | 38.9                                                                                | 38.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                 | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                               | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                                | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 17.4                                                                              | 65.0                                                                              |                                                                                   |                                                                                   | 7.1                                                                               | 52.4                                                                                | 52.4                                                                                |                                                                                     | 5.8                                                                                 | 22.1                                                                                | 5.8                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.15                                                                              | 0.57                                                                              |                                                                                   |                                                                                   | 0.06                                                                              | 0.46                                                                                | 0.46                                                                                |                                                                                     | 0.05                                                                                | 0.19                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.62                                                                              | 0.54                                                                              |                                                                                   |                                                                                   | 0.33                                                                              | 0.43                                                                                | 0.06                                                                                |                                                                                     | 0.22                                                                                | 0.66                                                                                | 0.12                                                                                |
| Control Delay           |                                                                                   | 52.6                                                                              | 20.5                                                                              |                                                                                   |                                                                                   | 77.4                                                                              | 8.1                                                                                 | 0.4                                                                                 |                                                                                     | 58.4                                                                                | 47.0                                                                                | 53.7                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 52.6                                                                              | 20.5                                                                              |                                                                                   |                                                                                   | 77.4                                                                              | 8.1                                                                                 | 0.4                                                                                 |                                                                                     | 58.4                                                                                | 47.0                                                                                | 53.7                                                                                |
| LOS                     |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 | A                                                                                   | A                                                                                   |                                                                                     | E                                                                                   | D                                                                                   | D                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 28.2                                                                              |                                                                                   |                                                                                   |                                                                                   | 13.8                                                                                |                                                                                     |                                                                                     | 37.5                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   | B                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 32.3                                                                              | 60.2                                                                              |                                                                                   |                                                                                   | 7.5                                                                               | 7.7                                                                                 | 0.0                                                                                 |                                                                                     | 3.9                                                                                 | 46.1                                                                                | 2.1                                                                                 |
| Queue Length 95th (m)   |                                                                                   | #61.8                                                                             | 124.1                                                                             |                                                                                   |                                                                                   | 15.1                                                                              | 8.7                                                                                 | 0.0                                                                                 |                                                                                     | 11.0                                                                                | 51.7                                                                                | 5.7                                                                                 |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                               |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               |                                                                                     | 100.0                                                                               |                                                                                     | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 517                                                                               | 1922                                                                              |                                                                                   |                                                                                   | 211                                                                               | 1536                                                                                | 774                                                                                 |                                                                                     | 89                                                                                  | 1093                                                                                | 176                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.62                                                                              | 0.54                                                                              |                                                                                   |                                                                                   | 0.33                                                                              | 0.43                                                                                | 0.06                                                                                |                                                                                     | 0.21                                                                                | 0.40                                                                                | 0.11                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 19 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 26.5

Intersection LOS: C

Intersection Capacity Utilization 75.5%

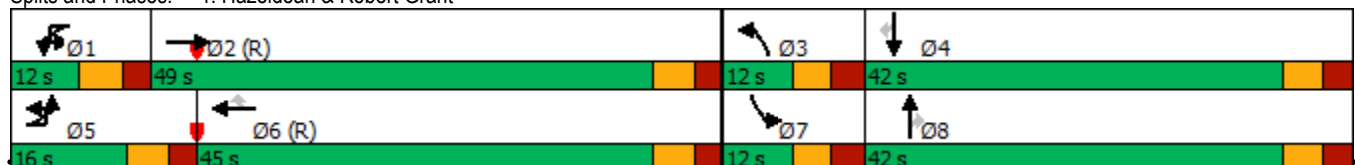
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Hazeldean & Robert Grant





| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 41.1  | 41.1  |
| Total Split (s)         | 42.0  | 42.0  |
| Total Split (%)         | 36.5% | 36.5% |
| Maximum Green (s)       | 35.9  | 35.9  |
| Yellow Time (s)         | 3.3   | 3.3   |
| All-Red Time (s)        | 2.8   | 2.8   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.1   | 6.1   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 28.0  | 28.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 22.1  | 22.1  |
| Actuated g/C Ratio      | 0.19  | 0.19  |
| v/c Ratio               | 0.33  | 0.31  |
| Control Delay           | 39.9  | 6.0   |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 39.9  | 6.0   |
| LOS                     | D     | A     |
| Approach Delay          | 28.8  |       |
| Approach LOS            | C     |       |
| Queue Length 50th (m)   | 21.5  | 0.0   |
| Queue Length 95th (m)   | 26.8  | 10.1  |
| Internal Link Dist (m)  | 227.2 |       |
| Turn Bay Length (m)     |       | 60.0  |
| Base Capacity (vph)     | 1093  | 585   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.20  | 0.22  |
| Intersection Summary    |       |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 1                                                                                 | 107                                                                               | 950                                                                               | 41                                                                                | 17                                                                                | 766                                                                               | 47                                                                                 | 29                                                                                  | 0                                                                                   | 26                                                                                  | 28                                                                                  | 0                                                                                   |
| Future Volume (vph)        | 1                                                                                 | 107                                                                               | 950                                                                               | 41                                                                                | 17                                                                                | 766                                                                               | 47                                                                                 | 29                                                                                  | 0                                                                                   | 26                                                                                  | 28                                                                                  | 0                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 75.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 180.0                                                                              | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 75.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                    | 10.0                                                                                |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   | 0.97                                                                               | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   | 0.994                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                              |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1768                                                                              | 3412                                                                              | 0                                                                                 | 1751                                                                              | 3402                                                                              | 1567                                                                               | 1751                                                                                | 1537                                                                                | 0                                                                                   | 1768                                                                                | 1843                                                                                |
| Flt Permitted              |                                                                                   | 0.316                                                                             |                                                                                   |                                                                                   | 0.289                                                                             |                                                                                   |                                                                                    | 0.757                                                                               |                                                                                     |                                                                                     | 0.740                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 587                                                                               | 3412                                                                              | 0                                                                                 | 531                                                                               | 3402                                                                              | 1518                                                                               | 1386                                                                                | 1537                                                                                | 0                                                                                   | 1368                                                                                | 1843                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   |                                                                                   | 89                                                                                 |                                                                                     | 160                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                    |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |
| Link Distance (m)          |                                                                                   |                                                                                   | 297.5                                                                             |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                    |                                                                                     | 259.5                                                                               |                                                                                     |                                                                                     | 237.4                                                                               |
| Travel Time (s)            |                                                                                   |                                                                                   | 17.9                                                                              |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                    |                                                                                     | 18.7                                                                                |                                                                                     |                                                                                     | 17.1                                                                                |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 4%                                                                                | 2%                                                                                | 2%                                                                                | 5%                                                                                | 2%                                                                                 | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  | 2%                                                                                  |
| Adj. Flow (vph)            | 1                                                                                 | 107                                                                               | 950                                                                               | 41                                                                                | 17                                                                                | 766                                                                               | 47                                                                                 | 29                                                                                  | 0                                                                                   | 26                                                                                  | 28                                                                                  | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 108                                                                               | 991                                                                               | 0                                                                                 | 17                                                                                | 766                                                                               | 47                                                                                 | 29                                                                                  | 26                                                                                  | 0                                                                                   | 28                                                                                  | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                               | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                    |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                    |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                 | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                  | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                              | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                                | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                                | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                    |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                    |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                    |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | pm+pt                                                                             | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                               | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                |                                                                                     |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |
| Permitted Phases           | 2                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                  | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 | 6                                                                                  | 8                                                                                   | 8                                                                                   |                                                                                     | 4                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | 7     |
| Traffic Volume (vph)       | 17    |
| Future Volume (vph)        | 17    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 40.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.98  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1552  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 300   |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 17    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 17    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 4     |
| Detector Phase             | 4     |
| Switch Phase               |       |

2: Hazeldean & Roger Griffiths  
AM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 11.2                                                                              | 11.2                                                                              | 31.3                                                                              |                                                                                   | 31.3                                                                              | 31.3                                                                              | 31.3                                                                               | 31.2                                                                                | 31.2                                                                                |                                                                                     | 31.2                                                                                | 31.2                                                                                |
| Total Split (s)         | 20.0                                                                              | 20.0                                                                              | 82.0                                                                              |                                                                                   | 62.0                                                                              | 62.0                                                                              | 62.0                                                                               | 33.0                                                                                | 33.0                                                                                |                                                                                     | 33.0                                                                                | 33.0                                                                                |
| Total Split (%)         | 17.4%                                                                             | 17.4%                                                                             | 71.3%                                                                             |                                                                                   | 53.9%                                                                             | 53.9%                                                                             | 53.9%                                                                              | 28.7%                                                                               | 28.7%                                                                               |                                                                                     | 28.7%                                                                               | 28.7%                                                                               |
| Maximum Green (s)       | 13.8                                                                              | 13.8                                                                              | 75.7                                                                              |                                                                                   | 55.7                                                                              | 55.7                                                                              | 55.7                                                                               | 26.8                                                                                | 26.8                                                                                |                                                                                     | 26.8                                                                                | 26.8                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.3                                                                                 | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.5                                                                               | 2.5                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                               | 2.6                                                                               | 2.6                                                                                | 2.9                                                                                 | 2.9                                                                                 |                                                                                     | 2.9                                                                                 | 2.9                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.2                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               | 6.3                                                                                | 6.2                                                                                 | 6.2                                                                                 |                                                                                     | 6.2                                                                                 | 6.2                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               | Lag                                                                               | Lag                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | C-Max                                                                             | C-Max                                                                             | C-Max                                                                              | None                                                                                | None                                                                                |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   | 18.0                                                                              | 18.0                                                                              | 18.0                                                                               | 18.0                                                                                | 18.0                                                                                |                                                                                     | 18.0                                                                                | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 92.8                                                                              | 94.0                                                                              |                                                                                   | 79.3                                                                              | 79.3                                                                              | 79.3                                                                               | 13.0                                                                                | 13.0                                                                                |                                                                                     | 13.0                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.81                                                                              | 0.82                                                                              |                                                                                   | 0.69                                                                              | 0.69                                                                              | 0.69                                                                               | 0.11                                                                                | 0.11                                                                                |                                                                                     | 0.11                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.20                                                                              | 0.36                                                                              |                                                                                   | 0.05                                                                              | 0.33                                                                              | 0.04                                                                               | 0.19                                                                                | 0.08                                                                                |                                                                                     | 0.18                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 4.4                                                                               | 3.7                                                                               |                                                                                   | 5.9                                                                               | 9.6                                                                               | 2.4                                                                                | 46.4                                                                                | 0.5                                                                                 |                                                                                     | 46.4                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 4.4                                                                               | 3.7                                                                               |                                                                                   | 5.9                                                                               | 9.6                                                                               | 2.4                                                                                | 46.4                                                                                | 0.5                                                                                 |                                                                                     | 46.4                                                                                |                                                                                     |
| LOS                     |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   | A                                                                                 | A                                                                                 | A                                                                                  | D                                                                                   | A                                                                                   |                                                                                     | D                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 3.7                                                                               |                                                                                   |                                                                                   | 9.1                                                                               |                                                                                    |                                                                                     | 24.7                                                                                |                                                                                     |                                                                                     | 28.9                                                                                |
| Approach LOS            |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                    |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 2.7                                                                               | 13.3                                                                              |                                                                                   | 1.6                                                                               | 53.5                                                                              | 1.6                                                                                | 5.7                                                                                 | 0.0                                                                                 |                                                                                     | 5.5                                                                                 |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | 11.1                                                                              | 37.8                                                                              |                                                                                   | m4.6                                                                              | 92.4                                                                              | 4.4                                                                                | 12.2                                                                                | 0.0                                                                                 |                                                                                     | 11.9                                                                                |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 273.5                                                                             |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                    |                                                                                     | 235.5                                                                               |                                                                                     |                                                                                     | 213.4                                                                               |
| Turn Bay Length (m)     |                                                                                   | 75.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 180.0                                                                              |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 615                                                                               | 2790                                                                              |                                                                                   | 366                                                                               | 2346                                                                              | 1074                                                                               | 322                                                                                 | 480                                                                                 |                                                                                     | 318                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.18                                                                              | 0.36                                                                              |                                                                                   | 0.05                                                                              | 0.33                                                                              | 0.04                                                                               | 0.09                                                                                | 0.05                                                                                |                                                                                     | 0.09                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 10 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 7.0

Intersection LOS: A

Intersection Capacity Utilization 68.0%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Hazeldean & Roger Griffiths





|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 31.2  |
| Total Split (s)         | 33.0  |
| Total Split (%)         | 28.7% |
| Maximum Green (s)       | 26.8  |
| Yellow Time (s)         | 3.3   |
| All-Red Time (s)        | 2.9   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.2   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | None  |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 18.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 13.0  |
| Actuated g/C Ratio      | 0.11  |
| v/c Ratio               | 0.04  |
| Control Delay           | 0.2   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.2   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.0   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 40.0  |
| Base Capacity (vph)     | 591   |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.03  |
| Intersection Summary    |       |



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |  |
| Traffic Volume (vph)       | 45                                                                                | 916                                                                               | 12                                                                                | 22                                                                                | 710                                                                               | 113                                                                               | 23                                                                                 | 0                                                                                   | 93                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Future Volume (vph)        | 45                                                                                | 916                                                                               | 12                                                                                | 22                                                                                | 710                                                                               | 113                                                                               | 23                                                                                 | 0                                                                                   | 93                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 80.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 105.0                                                                             | 55.0                                                                               |                                                                                     | 0.0                                                                                 | 35.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 2                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)           | 60.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                               |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 0.97                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   | 0.97                                                                              | 0.99                                                                               | 0.98                                                                                |                                                                                     | 0.99                                                                                | 0.98                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.858                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 3454                                                                              | 0                                                                                 | 1768                                                                              | 3537                                                                              | 1551                                                                              | 1768                                                                               | 1522                                                                                | 0                                                                                   | 3332                                                                                | 1569                                                                                | 0                                                                                   |
| Flt Permitted              | 0.322                                                                             |                                                                                   |                                                                                   | 0.263                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 598                                                                               | 3454                                                                              | 0                                                                                 | 489                                                                               | 3537                                                                              | 1503                                                                              | 1757                                                                               | 1522                                                                                | 0                                                                                   | 3298                                                                                | 1569                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   | 153                                                                               |                                                                                    | 333                                                                                 |                                                                                     |                                                                                     | 36                                                                                  |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                    | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                    | 289.2                                                                               |                                                                                     |                                                                                     | 233.8                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                    | 20.8                                                                                |                                                                                     |                                                                                     | 16.8                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 16%                                                                               | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                 | 1%                                                                                  | 3%                                                                                  | 4%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 45                                                                                | 916                                                                               | 12                                                                                | 22                                                                                | 710                                                                               | 113                                                                               | 23                                                                                 | 0                                                                                   | 93                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 45                                                                                | 928                                                                               | 0                                                                                 | 22                                                                                | 710                                                                               | 113                                                                               | 23                                                                                 | 93                                                                                  | 0                                                                                   | 74                                                                                  | 38                                                                                  | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | R NA                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |                                                                                     |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                | Perm                                                                              | Prot                                                                               | NA                                                                                  |                                                                                     | Prot                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 3                                                                                  | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector Phase             | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 | 6                                                                                 | 3                                                                                  | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

3: Mantra/Tillage & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                                | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 11.1                                                                              | 31.3                                                                              |                                                                                   | 11.1                                                                              | 31.3                                                                              | 31.3                                                                              | 11.5                                                                               | 31.5                                                                                |                                                                                     | 11.5                                                                                | 31.5                                                                                |                                                                                     |
| Total Split (s)         | 12.0                                                                              | 43.0                                                                              |                                                                                   | 12.0                                                                              | 43.0                                                                              | 43.0                                                                              | 28.0                                                                               | 32.0                                                                                |                                                                                     | 28.0                                                                                | 32.0                                                                                |                                                                                     |
| Total Split (%)         | 10.4%                                                                             | 37.4%                                                                             |                                                                                   | 10.4%                                                                             | 37.4%                                                                             | 37.4%                                                                             | 24.3%                                                                              | 27.8%                                                                               |                                                                                     | 24.3%                                                                               | 27.8%                                                                               |                                                                                     |
| Maximum Green (s)       | 5.9                                                                               | 36.7                                                                              |                                                                                   | 5.9                                                                               | 36.7                                                                              | 36.7                                                                              | 21.5                                                                               | 25.5                                                                                |                                                                                     | 21.5                                                                                | 25.5                                                                                |                                                                                     |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.3                                                                                | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |                                                                                     |
| All-Red Time (s)        | 2.4                                                                               | 2.6                                                                               |                                                                                   | 2.4                                                                               | 2.6                                                                               | 2.6                                                                               | 3.2                                                                                | 3.2                                                                                 |                                                                                     | 3.2                                                                                 | 3.2                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 6.1                                                                               | 6.3                                                                               |                                                                                   | 6.1                                                                               | 6.3                                                                               | 6.3                                                                               | 6.5                                                                                | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lag                                                                                | Lead                                                                                |                                                                                     | Lag                                                                                 | Lead                                                                                |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             | C-Max                                                                             | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                |                                                                                     |
| Walk Time (s)           |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                    | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 18.0                                                                              | 18.0                                                                              |                                                                                    | 18.0                                                                                |                                                                                     |                                                                                     | 18.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                    | 5                                                                                   |                                                                                     |                                                                                     | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     | 75.4                                                                              | 72.1                                                                              |                                                                                   | 72.0                                                                              | 66.8                                                                              | 66.8                                                                              | 7.6                                                                                | 13.0                                                                                |                                                                                     | 7.9                                                                                 | 15.7                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.66                                                                              | 0.63                                                                              |                                                                                   | 0.63                                                                              | 0.58                                                                              | 0.58                                                                              | 0.07                                                                               | 0.11                                                                                |                                                                                     | 0.07                                                                                | 0.14                                                                                |                                                                                     |
| v/c Ratio               | 0.10                                                                              | 0.43                                                                              |                                                                                   | 0.06                                                                              | 0.35                                                                              | 0.12                                                                              | 0.20                                                                               | 0.20                                                                                |                                                                                     | 0.32                                                                                | 0.16                                                                                |                                                                                     |
| Control Delay           | 9.2                                                                               | 19.5                                                                              |                                                                                   | 9.9                                                                               | 16.0                                                                              | 1.6                                                                               | 53.7                                                                               | 1.0                                                                                 |                                                                                     | 54.3                                                                                | 15.3                                                                                |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             | 9.2                                                                               | 19.5                                                                              |                                                                                   | 9.9                                                                               | 16.0                                                                              | 1.6                                                                               | 53.7                                                                               | 1.0                                                                                 |                                                                                     | 54.3                                                                                | 15.3                                                                                |                                                                                     |
| LOS                     | A                                                                                 | B                                                                                 |                                                                                   | A                                                                                 | B                                                                                 | A                                                                                 | D                                                                                  | A                                                                                   |                                                                                     | D                                                                                   | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 19.0                                                                              |                                                                                   |                                                                                   | 13.9                                                                              |                                                                                   |                                                                                    | 11.4                                                                                |                                                                                     |                                                                                     | 41.0                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Queue Length 50th (m)   | 5.7                                                                               | 81.1                                                                              |                                                                                   | 1.3                                                                               | 39.7                                                                              | 0.0                                                                               | 4.6                                                                                | 0.0                                                                                 |                                                                                     | 7.6                                                                                 | 0.4                                                                                 |                                                                                     |
| Queue Length 95th (m)   | 9.5                                                                               | 91.8                                                                              |                                                                                   | 5.7                                                                               | 73.1                                                                              | 4.6                                                                               | 12.0                                                                               | 0.0                                                                                 |                                                                                     | 14.2                                                                                | 8.4                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                   |                                                                                    | 265.2                                                                               |                                                                                     |                                                                                     | 209.8                                                                               |                                                                                     |
| Turn Bay Length (m)     | 80.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 105.0                                                                             | 55.0                                                                               |                                                                                     |                                                                                     | 35.0                                                                                |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 460                                                                               | 2166                                                                              |                                                                                   | 375                                                                               | 2054                                                                              | 937                                                                               | 330                                                                                | 596                                                                                 |                                                                                     | 622                                                                                 | 375                                                                                 |                                                                                     |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       | 0.10                                                                              | 0.43                                                                              |                                                                                   | 0.06                                                                              | 0.35                                                                              | 0.12                                                                              | 0.07                                                                               | 0.16                                                                                |                                                                                     | 0.12                                                                                | 0.10                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 98 (85%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.43

Intersection Signal Delay: 17.7

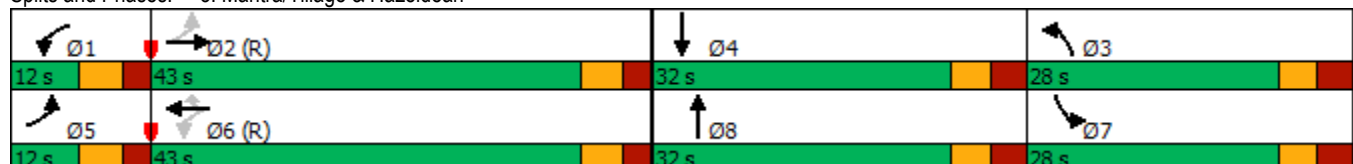
Intersection LOS: B

Intersection Capacity Utilization 57.8%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: Mantra/Tillage & Hazeldean



4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 252                                                                               | 863                                                                               | 176                                                                               | 5                                                                                 | 136                                                                               | 401                                                                                 | 187                                                                                 | 184                                                                                 | 835                                                                                 | 272                                                                                 | 185                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 252                                                                               | 863                                                                               | 176                                                                               | 5                                                                                 | 136                                                                               | 401                                                                                 | 187                                                                                 | 184                                                                                 | 835                                                                                 | 272                                                                                 | 185                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                     | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     | 75.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.98                                                                              |                                                                                   | 1.00                                                                              |                                                                                     | 0.98                                                                                | 0.99                                                                                |                                                                                     | 0.98                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3214                                                                              | 3468                                                                              | 1508                                                                              | 0                                                                                 | 3398                                                                              | 3435                                                                                | 1537                                                                                | 3300                                                                                | 3468                                                                                | 1567                                                                                | 3179                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3203                                                                              | 3468                                                                              | 1479                                                                              | 0                                                                                 | 3392                                                                              | 3435                                                                                | 1504                                                                                | 3283                                                                                | 3468                                                                                | 1538                                                                                | 3169                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 176                                                                               |                                                                                   |                                                                                   |                                                                                     | 228                                                                                 |                                                                                     |                                                                                     | 228                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                  |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                               |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                 |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                     | 4                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 8%                                                                                | 3%                                                                                | 6%                                                                                | 1%                                                                                | 2%                                                                                | 4%                                                                                  | 4%                                                                                  | 5%                                                                                  | 3%                                                                                  | 2%                                                                                  | 9%                                                                                  |
| Adj. Flow (vph)            | 7                                                                                 | 252                                                                               | 863                                                                               | 176                                                                               | 5                                                                                 | 136                                                                               | 401                                                                                 | 187                                                                                 | 184                                                                                 | 835                                                                                 | 272                                                                                 | 185                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 259                                                                               | 863                                                                               | 176                                                                               | 0                                                                                 | 141                                                                               | 401                                                                                 | 187                                                                                 | 184                                                                                 | 835                                                                                 | 272                                                                                 | 185                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                                |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                   | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 453   | 321   |
| Future Volume (vph)        | 453   | 321   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 200.0 |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3402  | 1508  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3402  | 1481  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 263   |
| Link Speed (k/h)           | 70    |       |
| Link Distance (m)          | 316.2 |       |
| Travel Time (s)            | 16.3  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Confl. Bikes (#/hr)        |       |       |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 5%    | 6%    |
| Adj. Flow (vph)            | 453   | 321   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 453   | 321   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | Right |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 6     |       |
| Permitted Phases           |       | 6     |
| Detector Phase             | 6     | 6     |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                                | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 21.0                                                                              | 21.0                                                                              | 43.0                                                                              | 43.0                                                                              | 14.0                                                                              | 14.0                                                                              | 36.0                                                                                | 36.0                                                                                | 17.0                                                                                | 36.0                                                                                | 36.0                                                                                | 17.0                                                                                |
| Total Split (%)         | 19.1%                                                                             | 19.1%                                                                             | 39.1%                                                                             | 39.1%                                                                             | 12.7%                                                                             | 12.7%                                                                             | 32.7%                                                                               | 32.7%                                                                               | 15.5%                                                                               | 32.7%                                                                               | 32.7%                                                                               | 15.5%                                                                               |
| Maximum Green (s)       | 14.5                                                                              | 14.5                                                                              | 36.5                                                                              | 36.5                                                                              | 7.5                                                                               | 7.5                                                                               | 29.5                                                                                | 29.5                                                                                | 10.5                                                                                | 29.5                                                                                | 29.5                                                                                | 10.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                 | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                                | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                                | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 13.2                                                                              | 32.8                                                                              | 32.8                                                                              |                                                                                   | 7.4                                                                               | 27.1                                                                                | 27.1                                                                                | 10.2                                                                                | 33.4                                                                                | 33.4                                                                                | 10.3                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              | 0.30                                                                              | 0.30                                                                              |                                                                                   | 0.07                                                                              | 0.25                                                                                | 0.25                                                                                | 0.09                                                                                | 0.30                                                                                | 0.30                                                                                | 0.09                                                                                |
| v/c Ratio               |                                                                                   | 0.67                                                                              | 0.83                                                                              | 0.31                                                                              |                                                                                   | 0.62                                                                              | 0.47                                                                                | 0.35                                                                                | 0.60                                                                                | 0.79                                                                                | 0.44                                                                                | 0.62                                                                                |
| Control Delay           |                                                                                   | 55.4                                                                              | 43.7                                                                              | 5.5                                                                               |                                                                                   | 57.0                                                                              | 38.4                                                                                | 12.0                                                                                | 63.3                                                                                | 34.6                                                                                | 6.7                                                                                 | 51.9                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 55.4                                                                              | 43.7                                                                              | 5.5                                                                               |                                                                                   | 57.0                                                                              | 38.4                                                                                | 12.0                                                                                | 63.3                                                                                | 34.6                                                                                | 6.7                                                                                 | 51.9                                                                                |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | D                                                                                   | B                                                                                   | E                                                                                   | C                                                                                   | A                                                                                   | D                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 40.9                                                                              |                                                                                   |                                                                                   |                                                                                   | 35.2                                                                                |                                                                                     |                                                                                     | 32.8                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 25.4                                                                              | 82.4                                                                              | 0.0                                                                               |                                                                                   | 14.2                                                                              | 38.9                                                                                | 2.1                                                                                 | 12.2                                                                                | 82.8                                                                                | 19.2                                                                                | 18.1                                                                                |
| Queue Length 95th (m)   |                                                                                   | 37.3                                                                              | 100.5                                                                             | 13.3                                                                              |                                                                                   | 23.7                                                                              | 51.8                                                                                | 26.1                                                                                | 30.8                                                                                | #116.2                                                                              | 5.4                                                                                 | 25.2                                                                                |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                               |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                     | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Base Capacity (vph)     |                                                                                   | 423                                                                               | 1150                                                                              | 608                                                                               |                                                                                   | 231                                                                               | 921                                                                                 | 570                                                                                 | 322                                                                                 | 1053                                                                                | 625                                                                                 | 311                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.61                                                                              | 0.75                                                                              | 0.29                                                                              |                                                                                   | 0.61                                                                              | 0.44                                                                                | 0.33                                                                                | 0.57                                                                                | 0.79                                                                                | 0.44                                                                                | 0.59                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 76 (69%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 34.6

Intersection LOS: C

Intersection Capacity Utilization 81.0%

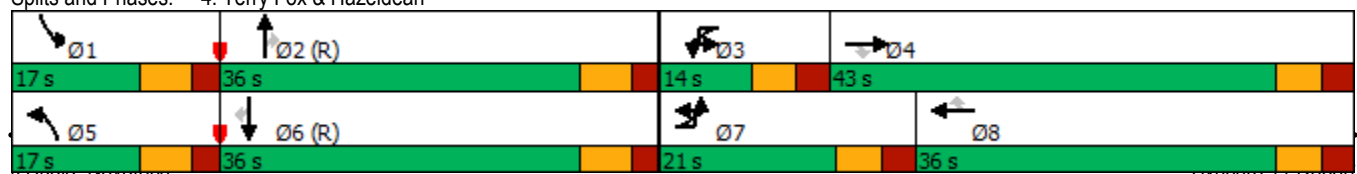
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean

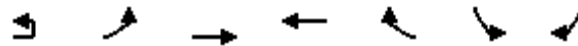


03/10/2024, 11:00 AM

Dynamic 11 Report



| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Switch Phase            |       |       |
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 35.5  | 35.5  |
| Total Split (s)         | 36.0  | 36.0  |
| Total Split (%)         | 32.7% | 32.7% |
| Maximum Green (s)       | 29.5  | 29.5  |
| Yellow Time (s)         | 4.2   | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 22.0  | 22.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 33.5  | 33.5  |
| Actuated g/C Ratio      | 0.30  | 0.30  |
| v/c Ratio               | 0.44  | 0.51  |
| Control Delay           | 28.4  | 13.7  |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 28.4  | 13.7  |
| LOS                     | C     | B     |
| Approach Delay          | 28.0  |       |
| Approach LOS            | C     |       |
| Queue Length 50th (m)   | 39.1  | 17.7  |
| Queue Length 95th (m)   | 54.3  | 52.8  |
| Internal Link Dist (m)  | 292.2 |       |
| Turn Bay Length (m)     |       | 200.0 |
| Base Capacity (vph)     | 1037  | 634   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.44  | 0.51  |
| Intersection Summary    |       |       |



| Lane Group                 | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 4     | 121   | 1025  | 823   | 72    | 74    | 68    |
| Future Volume (vph)        | 4     | 121   | 1025  | 823   | 72    | 74    | 68    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 35.0  |       |       | 0.0   | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       |       | 0     | 1     | 1     |
| Taper Length (m)           |       | 40.0  |       |       |       | 40.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  |
| Ped Bike Factor            |       | 0.99  |       | 1.00  |       | 0.99  | 0.98  |
| Frt                        |       |       |       | 0.988 |       |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1719  | 3468  | 3420  | 0     | 1768  | 1537  |
| Flt Permitted              |       | 0.309 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 556   | 3468  | 3420  | 0     | 1747  | 1500  |
| Right Turn on Red          |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 16    |       |       | 68    |
| Link Speed (k/h)           |       |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 157.6 | 314.8 |       | 401.6 |       |
| Travel Time (s)            |       |       | 9.5   | 18.9  |       | 28.9  |       |
| Confl. Peds. (#/hr)        |       | 10    |       |       | 10    | 10    | 10    |
| Peak Hour Factor           | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 1%    | 4%    | 3%    | 3%    | 1%    | 1%    | 4%    |
| Adj. Flow (vph)            | 4     | 121   | 1025  | 823   | 72    | 74    | 68    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 125   | 1025  | 895   | 0     | 74    | 68    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | L NA  | Left  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 8.0   | 4.0   |       | 4.0   |       |
| Link Offset(m)             |       |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 2     |       | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Thru  |       | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 10.0  |       | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 0.6   |       | 2.0   | 2.0   |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | NA    |       | Perm  | Perm  |
| Protected Phases           |       |       | 2     | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       |       |       | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     |       | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |



| Lane Group              | EBU   | EBL   | EBT   | WBT   | WBR | SBL   | SBR   |
|-------------------------|-------|-------|-------|-------|-----|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  | 10.0  | 10.0  |     | 10.0  | 10.0  |
| Minimum Split (s)       | 16.2  | 16.2  | 16.2  | 31.2  |     | 34.1  | 34.1  |
| Total Split (s)         | 76.0  | 76.0  | 76.0  | 76.0  |     | 34.0  | 34.0  |
| Total Split (%)         | 69.1% | 69.1% | 69.1% | 69.1% |     | 30.9% | 30.9% |
| Maximum Green (s)       | 69.8  | 69.8  | 69.8  | 69.8  |     | 27.9  | 27.9  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7   | 3.7   |     | 3.3   | 3.3   |
| All-Red Time (s)        | 2.5   | 2.5   | 2.5   | 2.5   |     | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.2   | 6.2   | 6.2   |     | 6.1   | 6.1   |
| Lead/Lag                |       |       |       |       |     |       |       |
| Lead-Lag Optimize?      |       |       |       |       |     |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max | C-Max | C-Max |     | None  | None  |
| Walk Time (s)           |       |       |       | 7.0   |     | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |       |       | 18.0  |     | 21.0  | 21.0  |
| Pedestrian Calls (#/hr) |       |       |       | 10    |     | 10    | 10    |
| Act Effct Green (s)     |       | 88.3  | 88.3  | 88.3  |     | 13.9  | 13.9  |
| Actuated g/C Ratio      |       | 0.80  | 0.80  | 0.80  |     | 0.13  | 0.13  |
| v/c Ratio               |       | 0.28  | 0.37  | 0.33  |     | 0.34  | 0.27  |
| Control Delay           |       | 15.2  | 12.8  | 4.9   |     | 61.1  | 25.2  |
| Queue Delay             |       | 0.0   | 0.3   | 0.0   |     | 0.0   | 0.0   |
| Total Delay             |       | 15.2  | 13.1  | 4.9   |     | 61.1  | 25.2  |
| LOS                     |       | B     | B     | A     |     | E     | C     |
| Approach Delay          |       |       | 13.4  | 4.9   |     | 43.9  |       |
| Approach LOS            |       |       | B     | A     |     | D     |       |
| Queue Length 50th (m)   |       | 13.1  | 56.5  | 19.7  |     | 14.6  | 2.6   |
| Queue Length 95th (m)   |       | m28.8 | 101.7 | 52.7  |     | m22.4 | m11.6 |
| Internal Link Dist (m)  |       |       | 133.6 | 290.8 |     | 377.6 |       |
| Turn Bay Length (m)     |       | 35.0  |       |       |     | 30.0  |       |
| Base Capacity (vph)     |       | 446   | 2782  | 2747  |     | 443   | 431   |
| Starvation Cap Reductn  |       | 0     | 974   | 0     |     | 0     | 0     |
| Spillback Cap Reductn   |       | 0     | 0     | 0     |     | 0     | 0     |
| Storage Cap Reductn     |       | 0     | 0     | 0     |     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.28  | 0.57  | 0.33  |     | 0.17  | 0.16  |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 73 (66%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay: 11.9

Intersection LOS: B

Intersection Capacity Utilization 62.9%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Hazeldean & Edgewater





|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                   | 1385                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1000                                                                                |
| Future Volume (vph)        | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                   | 1385                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1000                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                                | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.887                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1317                                                                              | 0                                                                                 | 1567                                                                              | 1516                                                                              | 0                                                                                 | 1768                                                                                | 3489                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3402                                                                                |
| Flt Permitted              | 0.693                                                                             |                                                                                   |                                                                                   | 0.755                                                                             |                                                                                   |                                                                                   | 0.270                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.160                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1284                                                                              | 1317                                                                              | 0                                                                                 | 1238                                                                              | 1516                                                                              | 0                                                                                 | 502                                                                                 | 3489                                                                                | 0                                                                                   | 0                                                                                   | 292                                                                                 | 3402                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 48                                                                                |                                                                                   |                                                                                     | 3                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                     | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                     | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 33%                                                                               | 14%                                                                               | 50%                                                                               | 3%                                                                                | 1%                                                                                  | 2%                                                                                  | 3%                                                                                  | 1%                                                                                  | 3%                                                                                  | 5%                                                                                  |
| Adj. Flow (vph)            | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                   | 1385                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1000                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 14                                                                                | 4                                                                                 | 0                                                                                 | 14                                                                                | 99                                                                                | 0                                                                                 | 1                                                                                   | 1415                                                                                | 0                                                                                   | 0                                                                                   | 161                                                                                 | 1000                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        |       |
| Traffic Volume (vph)       | 12    |
| Future Volume (vph)        | 12    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1480  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1436  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 35    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 8%    |
| Adj. Flow (vph)            | 12    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 12    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | Cl+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.5                                                                              | 36.5                                                                              |                                                                                   | 36.5                                                                              | 36.5                                                                              |                                                                                   | 34.5                                                                               | 34.5                                                                                |                                                                                     | 34.5                                                                                | 34.5                                                                                | 34.5                                                                                |
| Total Split (s)         | 37.0                                                                              | 37.0                                                                              |                                                                                   | 37.0                                                                              | 37.0                                                                              |                                                                                   | 73.0                                                                               | 73.0                                                                                |                                                                                     | 73.0                                                                                | 73.0                                                                                | 73.0                                                                                |
| Total Split (%)         | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 66.4%                                                                              | 66.4%                                                                               |                                                                                     | 66.4%                                                                               | 66.4%                                                                               | 66.4%                                                                               |
| Maximum Green (s)       | 30.5                                                                              | 30.5                                                                              |                                                                                   | 30.5                                                                              | 30.5                                                                              |                                                                                   | 66.5                                                                               | 66.5                                                                                |                                                                                     | 66.5                                                                                | 66.5                                                                                | 66.5                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 3.2                                                                               | 3.2                                                                               |                                                                                   | 3.2                                                                               | 3.2                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                                | 6.5                                                                                 |                                                                                     |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 21.0                                                                                | 21.0                                                                                | 21.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 14.3                                                                              | 14.3                                                                              |                                                                                   | 14.3                                                                              | 14.3                                                                              |                                                                                   | 82.7                                                                               | 82.7                                                                                |                                                                                     |                                                                                     | 82.7                                                                                | 82.7                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.75                                                                               | 0.75                                                                                |                                                                                     |                                                                                     | 0.75                                                                                | 0.75                                                                                |
| v/c Ratio               | 0.08                                                                              | 0.02                                                                              |                                                                                   | 0.09                                                                              | 0.42                                                                              |                                                                                   | 0.00                                                                               | 0.54                                                                                |                                                                                     |                                                                                     | 0.74                                                                                | 0.39                                                                                |
| Control Delay           | 38.8                                                                              | 25.2                                                                              |                                                                                   | 62.3                                                                              | 49.0                                                                              |                                                                                   | 2.0                                                                                | 5.4                                                                                 |                                                                                     |                                                                                     | 34.2                                                                                | 6.3                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 38.8                                                                              | 25.2                                                                              |                                                                                   | 62.3                                                                              | 49.0                                                                              |                                                                                   | 2.0                                                                                | 5.4                                                                                 |                                                                                     |                                                                                     | 34.2                                                                                | 6.3                                                                                 |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | E                                                                                 | D                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | C                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 35.8                                                                              |                                                                                   |                                                                                   | 50.7                                                                              |                                                                                   |                                                                                    | 5.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 10.1                                                                                |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 2.6                                                                               | 0.2                                                                               |                                                                                   | 3.0                                                                               | 12.4                                                                              |                                                                                   | 0.0                                                                                | 4.7                                                                                 |                                                                                     |                                                                                     | 11.9                                                                                | 24.6                                                                                |
| Queue Length 95th (m)   | 6.6                                                                               | 2.6                                                                               |                                                                                   | m9.3                                                                              | 30.6                                                                              |                                                                                   | m0.0                                                                               | 22.1                                                                                |                                                                                     |                                                                                     | #67.3                                                                               | 67.3                                                                                |
| Internal Link Dist (m)  |                                                                                   | 193.1                                                                             |                                                                                   |                                                                                   | 258.1                                                                             |                                                                                   |                                                                                    | 229.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 336.0                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 65.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |                                                                                     |
| Base Capacity (vph)     | 356                                                                               | 367                                                                               |                                                                                   | 343                                                                               | 455                                                                               |                                                                                   | 377                                                                                | 2624                                                                                |                                                                                     |                                                                                     | 219                                                                                 | 2558                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.04                                                                              | 0.01                                                                              |                                                                                   | 0.04                                                                              | 0.22                                                                              |                                                                                   | 0.00                                                                               | 0.54                                                                                |                                                                                     |                                                                                     | 0.74                                                                                | 0.39                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 16 (15%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 9.5

Intersection LOS: A

Intersection Capacity Utilization 78.0%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 73.0  |
| Total Split (%)         | 66.4% |
| Maximum Green (s)       | 66.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 82.7  |
| Actuated g/C Ratio      | 0.75  |
| v/c Ratio               | 0.01  |
| Control Delay           | 0.2   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.2   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.5   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1088  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (vph)       | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1257                                                                                | 1                                                                                   | 0                                                                                   | 840                                                                                 | 0                                                                                   |
| Future Volume (vph)        | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1257                                                                                | 1                                                                                   | 0                                                                                   | 840                                                                                 | 0                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 35.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 | 55.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)           | 25.0                                                                              |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     | 50.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.98                                                                              |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1861                                                                              | 1553                                                                              | 0                                                                                 | 1768                                                                              | 1861                                                                              | 0                                                                                 | 1768                                                                               | 3468                                                                                | 0                                                                                   | 1861                                                                                | 3370                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   | 0.769                                                                             |                                                                                   |                                                                                   | 0.336                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1861                                                                              | 1553                                                                              | 0                                                                                 | 1422                                                                              | 1861                                                                              | 0                                                                                 | 624                                                                                | 3468                                                                                | 0                                                                                   | 1861                                                                                | 3370                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 192                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 207.5                                                                             |                                                                                   |                                                                                   | 88.7                                                                              |                                                                                   |                                                                                    | 316.2                                                                               |                                                                                     |                                                                                     | 253.3                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 14.9                                                                              |                                                                                   |                                                                                   | 10.6                                                                              |                                                                                   |                                                                                    | 16.3                                                                                |                                                                                     |                                                                                     | 13.0                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 3%                                                                                  | 1%                                                                                  | 1%                                                                                  | 6%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1257                                                                                | 1                                                                                   | 0                                                                                   | 840                                                                                 | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 3                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1258                                                                                | 0                                                                                   | 0                                                                                   | 840                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                               | Left                                                                                | Right                                                                               | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 12.0                                                                                |                                                                                     |                                                                                     | 12.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |                                                                                     |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              |                                                                                   |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

7: Terry Fox & Tony Graham Rec  
AM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.5                                                                               | 32.5                                                                                |                                                                                     | 32.5                                                                                | 32.5                                                                                |                                                                                     |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              |                                                                                   | 77.0                                                                               | 77.0                                                                                |                                                                                     | 77.0                                                                                | 77.0                                                                                |                                                                                     |
| Total Split (%)         | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 70.0%                                                                              | 70.0%                                                                               |                                                                                     | 70.0%                                                                               | 70.0%                                                                               |                                                                                     |
| Maximum Green (s)       | 26.8                                                                              | 26.8                                                                              |                                                                                   | 26.8                                                                              | 26.8                                                                              |                                                                                   | 70.5                                                                               | 70.5                                                                                |                                                                                     | 70.5                                                                                | 70.5                                                                                |                                                                                     |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 |                                                                                     |
| All-Red Time (s)        | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.5                                                                                | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                               | 19.0                                                                                |                                                                                     | 19.0                                                                                | 19.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 13.2                                                                              |                                                                                   | 13.2                                                                              |                                                                                   |                                                                                   | 102.3                                                                              | 102.3                                                                               |                                                                                     |                                                                                     | 102.3                                                                               |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.93                                                                               | 0.93                                                                                |                                                                                     |                                                                                     | 0.93                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.01                                                                              |                                                                                   | 0.01                                                                              |                                                                                   |                                                                                   | 0.02                                                                               | 0.39                                                                                |                                                                                     |                                                                                     | 0.27                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 0.0                                                                               |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                   | 9.4                                                                                | 8.7                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 0.0                                                                               |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                   | 9.4                                                                                | 8.7                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| LOS                     |                                                                                   | A                                                                                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                    | 8.7                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 0.0                                                                               |                                                                                   | 0.2                                                                               |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | 0.0                                                                               |                                                                                   | 1.4                                                                               |                                                                                   |                                                                                   | m2.1                                                                               | 145.2                                                                               |                                                                                     |                                                                                     | 1.6                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   | 183.5                                                                             |                                                                                   |                                                                                   | 64.7                                                                              |                                                                                   |                                                                                    | 292.2                                                                               |                                                                                     |                                                                                     | 229.3                                                                               |                                                                                     |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 523                                                                               |                                                                                   | 346                                                                               |                                                                                   |                                                                                   | 580                                                                                | 3224                                                                                |                                                                                     |                                                                                     | 3133                                                                                |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.01                                                                              |                                                                                   | 0.00                                                                              |                                                                                   |                                                                                   | 0.02                                                                               | 0.39                                                                                |                                                                                     |                                                                                     | 0.27                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 26 (24%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.39

Intersection Signal Delay: 5.4

Intersection LOS: A

Intersection Capacity Utilization 57.7%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Terry Fox & Tony Graham Rec



8: Terry Fox & Sobey's  
AM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1243                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 747                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1243                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 747                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 10.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 30.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.91                                                                                | 0.91                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              | 0.98                                                                              | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.910                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.994                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.996                                                                               |
| Flt Protected              |                                                                                   | 0.986                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1526                                                                              | 0                                                                                 | 0                                                                                 | 1742                                                                              | 1567                                                                              | 1581                                                                               | 5042                                                                                | 0                                                                                   | 0                                                                                   | 1722                                                                                | 3421                                                                                |
| Flt Permitted              |                                                                                   | 0.899                                                                             |                                                                                   |                                                                                   | 0.715                                                                             |                                                                                   | 0.315                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.201                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1389                                                                              | 0                                                                                 | 0                                                                                 | 1297                                                                              | 1537                                                                              | 523                                                                                | 5042                                                                                | 0                                                                                   | 0                                                                                   | 364                                                                                 | 3421                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 16                                                                                |                                                                                   |                                                                                   |                                                                                   | 109                                                                               |                                                                                    | 10                                                                                  |                                                                                     |                                                                                     |                                                                                     | 3                                                                                   |
| Link Speed (k/h)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 132.0                                                                             |                                                                                   |                                                                                   | 152.6                                                                             |                                                                                   |                                                                                    | 140.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 142.7                                                                               |
| Travel Time (s)            |                                                                                   | 15.8                                                                              |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                    | 7.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.3                                                                                 |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 29%                                                                               | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 13%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 4%                                                                                  | 4%                                                                                  |
| Adj. Flow (vph)            | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1243                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 747                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 24                                                                                | 0                                                                                 | 0                                                                                 | 31                                                                                | 52                                                                                | 8                                                                                  | 1295                                                                                | 0                                                                                   | 0                                                                                   | 31                                                                                  | 765                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                              | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 5                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |

|                            |      |    |
|----------------------------|------|----|
| Lane Group                 | SBR  | Ø9 |
| Lane Configurations        |      |    |
| Traffic Volume (vph)       | 18   |    |
| Future Volume (vph)        | 18   |    |
| Ideal Flow (vphpl)         | 1800 |    |
| Storage Length (m)         | 0.0  |    |
| Storage Lanes              | 0    |    |
| Taper Length (m)           |      |    |
| Lane Util. Factor          | 0.95 |    |
| Ped Bike Factor            |      |    |
| Frt                        |      |    |
| Flt Protected              |      |    |
| Satd. Flow (prot)          | 0    |    |
| Flt Permitted              |      |    |
| Satd. Flow (perm)          | 0    |    |
| Right Turn on Red          | Yes  |    |
| Satd. Flow (RTOR)          |      |    |
| Link Speed (k/h)           |      |    |
| Link Distance (m)          |      |    |
| Travel Time (s)            |      |    |
| Confl. Peds. (#/hr)        | 5    |    |
| Confl. Bikes (#/hr)        |      |    |
| Peak Hour Factor           | 1.00 |    |
| Heavy Vehicles (%)         | 1%   |    |
| Adj. Flow (vph)            | 18   |    |
| Shared Lane Traffic (%)    |      |    |
| Lane Group Flow (vph)      | 0    |    |
| Enter Blocked Intersection | No   |    |
| Lane Alignment             | R NA |    |
| Median Width(m)            |      |    |
| Link Offset(m)             |      |    |
| Crosswalk Width(m)         |      |    |
| Two way Left Turn Lane     |      |    |
| Headway Factor             | 1.01 |    |
| Turning Speed (k/h)        | 14   |    |
| Number of Detectors        |      |    |
| Detector Template          |      |    |
| Leading Detector (m)       |      |    |
| Trailing Detector (m)      |      |    |
| Detector 1 Position(m)     |      |    |
| Detector 1 Size(m)         |      |    |
| Detector 1 Type            |      |    |
| Detector 1 Channel         |      |    |
| Detector 1 Extend (s)      |      |    |
| Detector 1 Queue (s)       |      |    |
| Detector 1 Delay (s)       |      |    |
| Detector 2 Position(m)     |      |    |
| Detector 2 Size(m)         |      |    |
| Detector 2 Type            |      |    |
| Detector 2 Channel         |      |    |
| Detector 2 Extend (s)      |      |    |
| Turn Type                  |      |    |
| Protected Phases           | 9    |    |
| Permitted Phases           |      |    |
| Detector Phase             |      |    |



8: Terry Fox & Sobey's  
AM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 5.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 11.2                                                                               | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                | 26.0                                                                                |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 15.0                                                                               | 72.0                                                                                |                                                                                     | 57.0                                                                                | 57.0                                                                                | 57.0                                                                                |
| Total Split (%)         | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 30.0%                                                                             | 30.0%                                                                             | 30.0%                                                                             | 13.6%                                                                              | 65.5%                                                                               |                                                                                     | 51.8%                                                                               | 51.8%                                                                               | 51.8%                                                                               |
| Maximum Green (s)       | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 9.0                                                                                | 66.0                                                                                |                                                                                     | 51.0                                                                                | 51.0                                                                                | 51.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 1.8                                                                                | 1.8                                                                                 |                                                                                     | 1.8                                                                                 | 1.8                                                                                 | 1.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               | 6.0                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 6.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               |                                                                                    | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 17.0                                                                              | 17.0                                                                              |                                                                                   | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              |                                                                                    | 13.0                                                                                |                                                                                     | 13.0                                                                                | 13.0                                                                                | 13.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 |                                                                                    | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 12.8                                                                              |                                                                                   |                                                                                   | 12.8                                                                              | 12.8                                                                              | 82.6                                                                               | 82.6                                                                                |                                                                                     |                                                                                     | 80.2                                                                                | 80.2                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.12                                                                              | 0.12                                                                              | 0.75                                                                               | 0.75                                                                                |                                                                                     |                                                                                     | 0.73                                                                                | 0.73                                                                                |
| v/c Ratio               |                                                                                   | 0.14                                                                              |                                                                                   |                                                                                   | 0.21                                                                              | 0.19                                                                              | 0.02                                                                               | 0.34                                                                                |                                                                                     |                                                                                     | 0.12                                                                                | 0.31                                                                                |
| Control Delay           |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              | 1.5                                                                               | 2.8                                                                                | 4.1                                                                                 |                                                                                     |                                                                                     | 4.3                                                                                 | 2.7                                                                                 |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              | 1.5                                                                               | 2.8                                                                                | 4.1                                                                                 |                                                                                     |                                                                                     | 4.3                                                                                 | 2.7                                                                                 |
| LOS                     |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 | A                                                                                 | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 17.8                                                                              |                                                                                   |                                                                                    | 4.1                                                                                 |                                                                                     |                                                                                     |                                                                                     | 2.8                                                                                 |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 1.5                                                                               |                                                                                   |                                                                                   | 5.8                                                                               | 0.0                                                                               | 0.3                                                                                | 36.3                                                                                |                                                                                     |                                                                                     | 0.4                                                                                 | 4.6                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 12.4                                                                              | 0.0                                                                               | m0.3                                                                               | 25.5                                                                                |                                                                                     |                                                                                     | m2.5                                                                                | 17.1                                                                                |
| Internal Link Dist (m)  |                                                                                   | 108.0                                                                             |                                                                                   |                                                                                   | 128.6                                                                             |                                                                                   |                                                                                    | 116.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 118.7                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 306                                                                               | 446                                                                               | 479                                                                                | 3788                                                                                |                                                                                     |                                                                                     | 265                                                                                 | 2493                                                                                |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.07                                                                              |                                                                                   |                                                                                   | 0.10                                                                              | 0.12                                                                              | 0.02                                                                               | 0.34                                                                                |                                                                                     |                                                                                     | 0.12                                                                                | 0.31                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 80 (73%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.34

Intersection Signal Delay: 4.3

Intersection LOS: A

Intersection Capacity Utilization 64.1%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Terry Fox & Sobey's





| Lane Group              | SBR | Ø9  |
|-------------------------|-----|-----|
| Switch Phase            |     |     |
| Minimum Initial (s)     |     | 3.0 |
| Minimum Split (s)       |     | 5.0 |
| Total Split (s)         |     | 5.0 |
| Total Split (%)         |     | 5%  |
| Maximum Green (s)       |     | 3.0 |
| Yellow Time (s)         |     | 2.0 |
| All-Red Time (s)        |     | 0.0 |
| Lost Time Adjust (s)    |     |     |
| Total Lost Time (s)     |     |     |
| Lead/Lag                |     |     |
| Lead-Lag Optimize?      |     |     |
| Vehicle Extension (s)   |     | 3.0 |
| Recall Mode             |     | Max |
| Walk Time (s)           |     |     |
| Flash Dont Walk (s)     |     |     |
| Pedestrian Calls (#/hr) |     |     |
| Act Effct Green (s)     |     |     |
| Actuated g/C Ratio      |     |     |
| v/c Ratio               |     |     |
| Control Delay           |     |     |
| Queue Delay             |     |     |
| Total Delay             |     |     |
| LOS                     |     |     |
| Approach Delay          |     |     |
| Approach LOS            |     |     |
| Queue Length 50th (m)   |     |     |
| Queue Length 95th (m)   |     |     |
| Internal Link Dist (m)  |     |     |
| Turn Bay Length (m)     |     |     |
| Base Capacity (vph)     |     |     |
| Starvation Cap Reductn  |     |     |
| Spillback Cap Reductn   |     |     |
| Storage Cap Reductn     |     |     |
| Reduced v/c Ratio       |     |     |
| Intersection Summary    |     |     |

9: Terry Fox & Halkirk/Winchester  
AM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                  | 1232                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 689                                                                                 |
| Future Volume (vph)        | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                  | 1232                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 689                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 15.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 65.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 120.0                                                                               |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 20.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.910                                                                             |                                                                                   |                                                                                   | 0.857                                                                             |                                                                                   |                                                                                    | 0.995                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1462                                                                              | 0                                                                                 | 1734                                                                              | 1555                                                                              | 0                                                                                 | 1069                                                                               | 3481                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3435                                                                                |
| Flt Permitted              | 0.689                                                                             |                                                                                   |                                                                                   | 0.741                                                                             |                                                                                   |                                                                                   | 0.388                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.194                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1276                                                                              | 1462                                                                              | 0                                                                                 | 1345                                                                              | 1555                                                                              | 0                                                                                 | 435                                                                                | 3481                                                                                | 0                                                                                   | 0                                                                                   | 360                                                                                 | 3435                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 15                                                                                |                                                                                   |                                                                                   | 63                                                                                |                                                                                   |                                                                                    | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 40                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 65.4                                                                              |                                                                                   |                                                                                   | 381.2                                                                             |                                                                                   |                                                                                    | 479.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 200.7                                                                               |
| Travel Time (s)            |                                                                                   | 4.7                                                                               |                                                                                   |                                                                                   | 34.3                                                                              |                                                                                   |                                                                                    | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     | 10.3                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 10                                                                                  |                                                                                     | 10                                                                                  |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 20%                                                                               | 13%                                                                               | 3%                                                                                | 20%                                                                               | 1%                                                                                | 67%                                                                                | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 4%                                                                                  |
| Adj. Flow (vph)            | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                  | 1232                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 689                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 20                                                                                | 25                                                                                | 0                                                                                 | 30                                                                                | 106                                                                               | 0                                                                                 | 6                                                                                  | 1273                                                                                | 0                                                                                   | 0                                                                                   | 77                                                                                  | 689                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                              | CI+Ex                                                                               |                                                                                     | CI+Ex                                                                               | CI+Ex                                                                               | CI+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                    | CI+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | CI+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        |       |
| Traffic Volume (vph)       | 10    |
| Future Volume (vph)        | 10    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 55.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1531  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 30    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 10    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 10    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

9: Terry Fox & Halkirk/Winchester  
AM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 28.3                                                                               | 28.3                                                                                |                                                                                     | 28.3                                                                                | 28.3                                                                                | 28.3                                                                                |
| Total Split (s)         | 38.0                                                                              | 38.0                                                                              |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 72.0                                                                               | 72.0                                                                                |                                                                                     | 72.0                                                                                | 72.0                                                                                | 72.0                                                                                |
| Total Split (%)         | 34.5%                                                                             | 34.5%                                                                             |                                                                                   | 34.5%                                                                             | 34.5%                                                                             |                                                                                   | 65.5%                                                                              | 65.5%                                                                               |                                                                                     | 65.5%                                                                               | 65.5%                                                                               | 65.5%                                                                               |
| Maximum Green (s)       | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 65.7                                                                               | 65.7                                                                                |                                                                                     | 65.7                                                                                | 65.7                                                                                | 65.7                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.1                                                                                | 2.1                                                                                 |                                                                                     | 2.1                                                                                 | 2.1                                                                                 | 2.1                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.3                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 15.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 10                                                                                 | 10                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 14.2                                                                              | 14.2                                                                              |                                                                                   | 14.2                                                                              | 14.2                                                                              |                                                                                   | 83.5                                                                               | 83.5                                                                                |                                                                                     |                                                                                     | 83.5                                                                                | 83.5                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.76                                                                               | 0.76                                                                                |                                                                                     |                                                                                     | 0.76                                                                                | 0.76                                                                                |
| v/c Ratio               | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.17                                                                              | 0.42                                                                              |                                                                                   | 0.02                                                                               | 0.48                                                                                |                                                                                     |                                                                                     | 0.28                                                                                | 0.26                                                                                |
| Control Delay           | 40.1                                                                              | 23.2                                                                              |                                                                                   | 41.6                                                                              | 23.5                                                                              |                                                                                   | 6.0                                                                                | 6.8                                                                                 |                                                                                     |                                                                                     | 17.5                                                                                | 10.0                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 40.1                                                                              | 23.2                                                                              |                                                                                   | 41.6                                                                              | 23.5                                                                              |                                                                                   | 6.0                                                                                | 6.8                                                                                 |                                                                                     |                                                                                     | 17.5                                                                                | 10.0                                                                                |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 30.7                                                                              |                                                                                   |                                                                                   | 27.5                                                                              |                                                                                   |                                                                                    | 6.8                                                                                 |                                                                                     |                                                                                     |                                                                                     | 10.7                                                                                |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 3.7                                                                               | 1.9                                                                               |                                                                                   | 5.6                                                                               | 8.1                                                                               |                                                                                   | 0.2                                                                                | 33.4                                                                                |                                                                                     |                                                                                     | 5.9                                                                                 | 27.2                                                                                |
| Queue Length 95th (m)   | 8.4                                                                               | 7.5                                                                               |                                                                                   | 11.3                                                                              | 18.7                                                                              |                                                                                   | 2.0                                                                                | 91.8                                                                                |                                                                                     |                                                                                     | 22.0                                                                                | 60.1                                                                                |
| Internal Link Dist (m)  |                                                                                   | 41.4                                                                              |                                                                                   |                                                                                   | 357.2                                                                             |                                                                                   |                                                                                    | 455.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 176.7                                                                               |
| Turn Bay Length (m)     | 15.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 120.0                                                                               |                                                                                     |
| Base Capacity (vph)     | 371                                                                               | 435                                                                               |                                                                                   | 391                                                                               | 497                                                                               |                                                                                   | 330                                                                                | 2645                                                                                |                                                                                     |                                                                                     | 273                                                                                 | 2608                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.05                                                                              | 0.06                                                                              |                                                                                   | 0.08                                                                              | 0.21                                                                              |                                                                                   | 0.02                                                                               | 0.48                                                                                |                                                                                     |                                                                                     | 0.28                                                                                | 0.26                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 40 (36%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 9.9

Intersection LOS: A

Intersection Capacity Utilization 72.2%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Terry Fox & Halkirk/Winchester





|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 28.3  |
| Total Split (s)         | 72.0  |
| Total Split (%)         | 65.5% |
| Maximum Green (s)       | 65.7  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.1   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.3   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 15.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 83.5  |
| Actuated g/C Ratio      | 0.76  |
| v/c Ratio               | 0.01  |
| Control Delay           | 6.0   |
| Queue Delay             | 0.0   |
| Total Delay             | 6.0   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.1   |
| Queue Length 95th (m)   | m1.0  |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 55.0  |
| Base Capacity (vph)     | 1169  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |   |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 301                                                                               | 1069                                                                              | 17                                                                                | 1                                                                                 | 147                                                                               | 1420                                                                                | 101                                                                                 | 16                                                                                  | 257                                                                                 | 108                                                                                 | 132                                                                                 |
| Future Volume (vph)        | 2                                                                                 | 301                                                                               | 1069                                                                              | 17                                                                                | 1                                                                                 | 147                                                                               | 1420                                                                                | 101                                                                                 | 16                                                                                  | 257                                                                                 | 108                                                                                 | 132                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                     |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 0.99                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3494                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3537                                                                                | 1582                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3426                                                                              | 3494                                                                              | 0                                                                                 | 0                                                                                 | 3390                                                                              | 3537                                                                                | 1555                                                                                | 1746                                                                                | 3502                                                                                | 1539                                                                                | 3408                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 128                                                                                 |                                                                                     |                                                                                     | 128                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                               |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                                |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 301                                                                               | 1069                                                                              | 17                                                                                | 1                                                                                 | 147                                                                               | 1420                                                                                | 101                                                                                 | 16                                                                                  | 257                                                                                 | 108                                                                                 | 132                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 303                                                                               | 1086                                                                              | 0                                                                                 | 0                                                                                 | 148                                                                               | 1420                                                                                | 101                                                                                 | 16                                                                                  | 257                                                                                 | 108                                                                                 | 132                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 97                                                                                | 14                                                                                | 97                                                                                |                                                                                     | 14                                                                                  | 97                                                                                  |                                                                                     | 97                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 418   | 390   |
| Future Volume (vph)        | 418   | 390   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 60.0  |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3502  | 1582  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3502  | 1555  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 183   |
| Link Speed (k/h)           | 50    |       |
| Link Distance (m)          | 251.2 |       |
| Travel Time (s)            | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 2%    | 1%    |
| Adj. Flow (vph)            | 418   | 390   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 418   | 390   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | R NA  |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 4     |       |
| Permitted Phases           |       | 4     |
| Detector Phase             | 4     | 4     |
| Switch Phase               |       |       |



|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 61.0                                                                              |                                                                                   | 15.0                                                                              | 15.0                                                                              | 60.0                                                                                | 60.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 12.3%                                                                             | 12.3%                                                                             | 46.9%                                                                             |                                                                                   | 11.5%                                                                             | 11.5%                                                                             | 46.2%                                                                               | 46.2%                                                                               | 9.2%                                                                                | 32.3%                                                                               | 32.3%                                                                               | 9.2%                                                                                |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 54.9                                                                              |                                                                                   | 8.9                                                                               | 8.9                                                                               | 53.9                                                                                | 53.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                 | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                               | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                                | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 17.6                                                                              | 68.6                                                                              |                                                                                   |                                                                                   | 9.9                                                                               | 60.9                                                                                | 60.9                                                                                | 5.8                                                                                 | 21.2                                                                                | 21.2                                                                                | 5.9                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.53                                                                              |                                                                                   |                                                                                   | 0.08                                                                              | 0.47                                                                                | 0.47                                                                                | 0.04                                                                                | 0.16                                                                                | 0.16                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.65                                                                              | 0.59                                                                              |                                                                                   |                                                                                   | 0.57                                                                              | 0.86                                                                                | 0.13                                                                                | 0.21                                                                                | 0.45                                                                                | 0.30                                                                                | 0.85                                                                                |
| Control Delay           |                                                                                   | 61.1                                                                              | 24.8                                                                              |                                                                                   |                                                                                   | 84.6                                                                              | 28.7                                                                                | 1.9                                                                                 | 66.2                                                                                | 49.9                                                                                | 6.1                                                                                 | 102.6                                                                               |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 61.1                                                                              | 24.8                                                                              |                                                                                   |                                                                                   | 84.6                                                                              | 28.7                                                                                | 1.9                                                                                 | 66.2                                                                                | 49.9                                                                                | 6.1                                                                                 | 102.6                                                                               |
| LOS                     |                                                                                   | E                                                                                 | C                                                                                 |                                                                                   |                                                                                   | F                                                                                 | C                                                                                   | A                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   | F                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 32.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 32.0                                                                                |                                                                                     |                                                                                     | 38.2                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   | C                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 34.7                                                                              | 80.8                                                                              |                                                                                   |                                                                                   | 17.4                                                                              | 166.6                                                                               | 2.8                                                                                 | 3.7                                                                                 | 31.0                                                                                | 0.0                                                                                 | 16.2                                                                                |
| Queue Length 95th (m)   |                                                                                   | #70.3                                                                             | 134.7                                                                             |                                                                                   |                                                                                   | 27.3                                                                              | #218.6                                                                              | m3.0                                                                                | 10.8                                                                                | 35.7                                                                                | 8.9                                                                                 | #32.8                                                                               |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                               |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 464                                                                               | 1844                                                                              |                                                                                   |                                                                                   | 264                                                                               | 1658                                                                                | 796                                                                                 | 79                                                                                  | 967                                                                                 | 517                                                                                 | 155                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.65                                                                              | 0.59                                                                              |                                                                                   |                                                                                   | 0.56                                                                              | 0.86                                                                                | 0.13                                                                                | 0.20                                                                                | 0.27                                                                                | 0.21                                                                                | 0.85                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 15 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 36.9

Intersection LOS: D

Intersection Capacity Utilization 101.6%

ICU Level of Service G

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Hazeldean & Robert Grant





| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 41.1  | 41.1  |
| Total Split (s)         | 42.0  | 42.0  |
| Total Split (%)         | 32.3% | 32.3% |
| Maximum Green (s)       | 35.9  | 35.9  |
| Yellow Time (s)         | 3.3   | 3.3   |
| All-Red Time (s)        | 2.8   | 2.8   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.1   | 6.1   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 28.0  | 28.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 28.4  | 28.4  |
| Actuated g/C Ratio      | 0.22  | 0.22  |
| v/c Ratio               | 0.55  | 0.81  |
| Control Delay           | 47.3  | 38.4  |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 47.3  | 38.4  |
| LOS                     | D     | D     |
| Approach Delay          | 51.4  |       |
| Approach LOS            | D     |       |
| Queue Length 50th (m)   | 47.1  | 49.3  |
| Queue Length 95th (m)   | 57.1  | 78.5  |
| Internal Link Dist (m)  | 227.2 |       |
| Turn Bay Length (m)     |       | 60.0  |
| Base Capacity (vph)     | 967   | 561   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.43  | 0.70  |
| Intersection Summary    |       |       |

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |  |
| Traffic Volume (vph)       | 166                                                                               | 1156                                                                              | 83                                                                                | 41                                                                                | 1388                                                                              | 61                                                                                | 81                                                                                  | 0                                                                                   | 31                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Future Volume (vph)        | 166                                                                               | 1156                                                                              | 83                                                                                | 41                                                                                | 1388                                                                              | 61                                                                                | 81                                                                                  | 0                                                                                   | 31                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 75.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 180.0                                                                             | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 40.0                                                                                |                                                                                     | 40.0                                                                                |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   | 0.97                                                                              | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                |                                                                                     | 0.98                                                                                |
| Frt                        |                                                                                   | 0.990                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 3491                                                                              | 0                                                                                 | 1751                                                                              | 3502                                                                              | 1582                                                                              | 1751                                                                                | 1536                                                                                | 0                                                                                   | 1768                                                                                | 1843                                                                                | 1582                                                                                |
| Flt Permitted              | 0.131                                                                             |                                                                                   |                                                                                   | 0.226                                                                             |                                                                                   |                                                                                   | 0.757                                                                               |                                                                                     |                                                                                     | 0.737                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 244                                                                               | 3491                                                                              | 0                                                                                 | 416                                                                               | 3502                                                                              | 1530                                                                              | 1384                                                                                | 1536                                                                                | 0                                                                                   | 1362                                                                                | 1843                                                                                | 1551                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 13                                                                                |                                                                                   |                                                                                   |                                                                                   | 79                                                                                |                                                                                     | 120                                                                                 |                                                                                     |                                                                                     |                                                                                     | 207                                                                                 |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 297.5                                                                             |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                     | 259.5                                                                               |                                                                                     |                                                                                     | 237.4                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 17.9                                                                              |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                     | 18.7                                                                                |                                                                                     |                                                                                     | 17.1                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 166                                                                               | 1156                                                                              | 83                                                                                | 41                                                                                | 1388                                                                              | 61                                                                                | 81                                                                                  | 0                                                                                   | 31                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 166                                                                               | 1239                                                                              | 0                                                                                 | 41                                                                                | 1388                                                                              | 61                                                                                | 81                                                                                  | 31                                                                                  | 0                                                                                   | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 97                                                                                | 97                                                                                |                                                                                   | 14                                                                                | 97                                                                                  |                                                                                     | 97                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                | Right                                                                               |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                |                                                                                     | Perm                                                                                |
| Protected Phases           | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                 | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     | 4                                                                                   |
| Detector Phase             | 5                                                                                 | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 | 6                                                                                 | 8                                                                                   | 8                                                                                   |                                                                                     | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

2: Hazeldean & Roger Griffiths  
PM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 11.2                                                                              | 31.3                                                                              |                                                                                   | 31.3                                                                              | 31.3                                                                              | 31.3                                                                              | 31.2                                                                               | 31.2                                                                                |                                                                                     | 31.2                                                                                | 31.2                                                                                | 31.2                                                                                |
| Total Split (s)         | 20.0                                                                              | 97.0                                                                              |                                                                                   | 77.0                                                                              | 77.0                                                                              | 77.0                                                                              | 33.0                                                                               | 33.0                                                                                |                                                                                     | 33.0                                                                                | 33.0                                                                                | 33.0                                                                                |
| Total Split (%)         | 15.4%                                                                             | 74.6%                                                                             |                                                                                   | 59.2%                                                                             | 59.2%                                                                             | 59.2%                                                                             | 25.4%                                                                              | 25.4%                                                                               |                                                                                     | 25.4%                                                                               | 25.4%                                                                               | 25.4%                                                                               |
| Maximum Green (s)       | 13.8                                                                              | 90.7                                                                              |                                                                                   | 70.7                                                                              | 70.7                                                                              | 70.7                                                                              | 26.8                                                                               | 26.8                                                                                |                                                                                     | 26.8                                                                                | 26.8                                                                                | 26.8                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.3                                                                                | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.5                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                               | 2.6                                                                               | 2.6                                                                               | 2.9                                                                                | 2.9                                                                                 |                                                                                     | 2.9                                                                                 | 2.9                                                                                 | 2.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.2                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               | 6.3                                                                               | 6.2                                                                                | 6.2                                                                                 |                                                                                     | 6.2                                                                                 | 6.2                                                                                 | 6.2                                                                                 |
| Lead/Lag                | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               |                                                                                   |                                                                                   | Lag                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | C-Max                                                                             |                                                                                   | C-Max                                                                             | C-Max                                                                             | C-Max                                                                             | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   | 18.0                                                                              |                                                                                   | 18.0                                                                              | 18.0                                                                              | 18.0                                                                              | 18.0                                                                               | 18.0                                                                                |                                                                                     | 18.0                                                                                | 18.0                                                                                | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 102.0                                                                             | 101.9                                                                             |                                                                                   | 86.0                                                                              | 86.0                                                                              | 86.0                                                                              | 15.6                                                                               | 15.6                                                                                |                                                                                     | 15.6                                                                                |                                                                                     | 15.6                                                                                |
| Actuated g/C Ratio      | 0.78                                                                              | 0.78                                                                              |                                                                                   | 0.66                                                                              | 0.66                                                                              | 0.66                                                                              | 0.12                                                                               | 0.12                                                                                |                                                                                     | 0.12                                                                                |                                                                                     | 0.12                                                                                |
| v/c Ratio               | 0.54                                                                              | 0.45                                                                              |                                                                                   | 0.15                                                                              | 0.60                                                                              | 0.06                                                                              | 0.49                                                                               | 0.11                                                                                |                                                                                     | 0.58                                                                                |                                                                                     | 0.19                                                                                |
| Control Delay           | 21.8                                                                              | 8.8                                                                               |                                                                                   | 2.3                                                                               | 4.8                                                                               | 0.1                                                                               | 62.0                                                                               | 0.7                                                                                 |                                                                                     | 66.9                                                                                |                                                                                     | 1.2                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay             | 21.8                                                                              | 8.8                                                                               |                                                                                   | 2.3                                                                               | 4.8                                                                               | 0.1                                                                               | 62.0                                                                               | 0.7                                                                                 |                                                                                     | 66.9                                                                                |                                                                                     | 1.2                                                                                 |
| LOS                     | C                                                                                 | A                                                                                 |                                                                                   | A                                                                                 | A                                                                                 | A                                                                                 | E                                                                                  | A                                                                                   |                                                                                     | E                                                                                   |                                                                                     | A                                                                                   |
| Approach Delay          |                                                                                   | 10.3                                                                              |                                                                                   |                                                                                   | 4.6                                                                               |                                                                                   |                                                                                    | 45.1                                                                                |                                                                                     |                                                                                     | 38.9                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Queue Length 50th (m)   | 11.9                                                                              | 34.8                                                                              |                                                                                   | 0.4                                                                               | 7.5                                                                               | 0.1                                                                               | 18.3                                                                               | 0.0                                                                                 |                                                                                     | 21.6                                                                                |                                                                                     | 0.0                                                                                 |
| Queue Length 95th (m)   | m46.0                                                                             | 105.7                                                                             |                                                                                   | m0.7                                                                              | 9.0                                                                               | m0.0                                                                              | 30.7                                                                               | 0.0                                                                                 |                                                                                     | 34.9                                                                                |                                                                                     | 0.0                                                                                 |
| Internal Link Dist (m)  |                                                                                   | 273.5                                                                             |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                    | 235.5                                                                               |                                                                                     |                                                                                     | 213.4                                                                               |                                                                                     |
| Turn Bay Length (m)     | 75.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 180.0                                                                             |                                                                                    |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     | 40.0                                                                                |
| Base Capacity (vph)     | 357                                                                               | 2740                                                                              |                                                                                   | 275                                                                               | 2316                                                                              | 1039                                                                              | 285                                                                                | 411                                                                                 |                                                                                     | 280                                                                                 |                                                                                     | 484                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       | 0.46                                                                              | 0.45                                                                              |                                                                                   | 0.15                                                                              | 0.60                                                                              | 0.06                                                                              | 0.28                                                                               | 0.08                                                                                |                                                                                     | 0.34                                                                                |                                                                                     | 0.14                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 114 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 10.3

Intersection LOS: B

Intersection Capacity Utilization 79.3%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Hazeldean & Roger Griffiths



3: Mantra/Tillage & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 1                                                                                 | 82                                                                                | 1063                                                                              | 24                                                                                | 89                                                                                | 1344                                                                              | 212                                                                                | 20                                                                                  | 2                                                                                   | 43                                                                                  | 177                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 1                                                                                 | 82                                                                                | 1063                                                                              | 24                                                                                | 89                                                                                | 1344                                                                              | 212                                                                                | 20                                                                                  | 2                                                                                   | 43                                                                                  | 177                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 80.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 105.0                                                                              | 55.0                                                                                |                                                                                     | 0.0                                                                                 | 35.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   |                                                                                     | 0                                                                                   | 2                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 60.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                    | 35.0                                                                                |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.97                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.95                                                                               | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                | 0.98                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                              |                                                                                     | 0.857                                                                               |                                                                                     |                                                                                     | 0.851                                                                               |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1768                                                                              | 3522                                                                              | 0                                                                                 | 1701                                                                              | 3537                                                                              | 1582                                                                               | 1406                                                                                | 1565                                                                                | 0                                                                                   | 3431                                                                                | 1553                                                                                |
| Flt Permitted              |                                                                                   | 0.112                                                                             |                                                                                   |                                                                                   | 0.180                                                                             |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 208                                                                               | 3522                                                                              | 0                                                                                 | 322                                                                               | 3537                                                                              | 1510                                                                               | 1397                                                                                | 1565                                                                                | 0                                                                                   | 3389                                                                                | 1553                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   | 207                                                                                |                                                                                     | 43                                                                                  |                                                                                     |                                                                                     | 143                                                                                 |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                    |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |
| Link Distance (m)          |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                    |                                                                                     | 289.2                                                                               |                                                                                     |                                                                                     | 233.8                                                                               |
| Travel Time (s)            |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                    |                                                                                     | 20.8                                                                                |                                                                                     |                                                                                     | 16.8                                                                                |
| Confl. Peds. (#/hr)        |                                                                                   | 10                                                                                |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 10                                                                                 | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 5%                                                                                | 1%                                                                                | 1%                                                                                 | 27%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 1                                                                                 | 82                                                                                | 1063                                                                              | 24                                                                                | 89                                                                                | 1344                                                                              | 212                                                                                | 20                                                                                  | 2                                                                                   | 43                                                                                  | 177                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 83                                                                                | 1087                                                                              | 0                                                                                 | 89                                                                                | 1344                                                                              | 212                                                                                | 20                                                                                  | 45                                                                                  | 0                                                                                   | 177                                                                                 | 144                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | R NA                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                               | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                    |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                    |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                 | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                  | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                              | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                                | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                                | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                    |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                    |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                    |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | pm+pt                                                                             | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                | Perm                                                                               | Prot                                                                                | NA                                                                                  |                                                                                     | Prot                                                                                | NA                                                                                  |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                    | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |
| Permitted Phases           | 2                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 | 6                                                                                  | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |      |
|----------------------------|------|
| Lane Group                 | SBR  |
| Lane Configurations        |      |
| Traffic Volume (vph)       | 143  |
| Future Volume (vph)        | 143  |
| Ideal Flow (vphpl)         | 1800 |
| Storage Length (m)         | 0.0  |
| Storage Lanes              | 0    |
| Taper Length (m)           |      |
| Lane Util. Factor          | 1.00 |
| Ped Bike Factor            |      |
| Frt                        |      |
| Flt Protected              |      |
| Satd. Flow (prot)          | 0    |
| Flt Permitted              |      |
| Satd. Flow (perm)          | 0    |
| Right Turn on Red          | Yes  |
| Satd. Flow (RTOR)          |      |
| Link Speed (k/h)           |      |
| Link Distance (m)          |      |
| Travel Time (s)            |      |
| Confl. Peds. (#/hr)        | 5    |
| Peak Hour Factor           | 1.00 |
| Heavy Vehicles (%)         | 1%   |
| Adj. Flow (vph)            | 143  |
| Shared Lane Traffic (%)    |      |
| Lane Group Flow (vph)      | 0    |
| Enter Blocked Intersection | No   |
| Lane Alignment             | R NA |
| Median Width(m)            |      |
| Link Offset(m)             |      |
| Crosswalk Width(m)         |      |
| Two way Left Turn Lane     |      |
| Headway Factor             | 1.01 |
| Turning Speed (k/h)        | 14   |
| Number of Detectors        |      |
| Detector Template          |      |
| Leading Detector (m)       |      |
| Trailing Detector (m)      |      |
| Detector 1 Position(m)     |      |
| Detector 1 Size(m)         |      |
| Detector 1 Type            |      |
| Detector 1 Channel         |      |
| Detector 1 Extend (s)      |      |
| Detector 1 Queue (s)       |      |
| Detector 1 Delay (s)       |      |
| Detector 2 Position(m)     |      |
| Detector 2 Size(m)         |      |
| Detector 2 Type            |      |
| Detector 2 Channel         |      |
| Detector 2 Extend (s)      |      |
| Turn Type                  |      |
| Protected Phases           |      |
| Permitted Phases           |      |
| Detector Phase             |      |
| Switch Phase               |      |

3: Mantra/Tillage & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 10.0                                                                              | 10.0                                                                               | 5.0                                                                                 | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 10.0                                                                                |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 31.3                                                                              |                                                                                   | 11.1                                                                              | 31.3                                                                              | 31.3                                                                               | 11.5                                                                                | 31.5                                                                                |                                                                                     | 11.5                                                                                | 31.5                                                                                |
| Total Split (s)         | 17.0                                                                              | 17.0                                                                              | 53.0                                                                              |                                                                                   | 17.0                                                                              | 53.0                                                                              | 53.0                                                                               | 28.0                                                                                | 32.0                                                                                |                                                                                     | 28.0                                                                                | 32.0                                                                                |
| Total Split (%)         | 13.1%                                                                             | 13.1%                                                                             | 40.8%                                                                             |                                                                                   | 13.1%                                                                             | 40.8%                                                                             | 40.8%                                                                              | 21.5%                                                                               | 24.6%                                                                               |                                                                                     | 21.5%                                                                               | 24.6%                                                                               |
| Maximum Green (s)       | 10.9                                                                              | 10.9                                                                              | 46.7                                                                              |                                                                                   | 10.9                                                                              | 46.7                                                                              | 46.7                                                                               | 21.5                                                                                | 25.5                                                                                |                                                                                     | 21.5                                                                                | 25.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.3                                                                                 | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.6                                                                               |                                                                                   | 2.4                                                                               | 2.6                                                                               | 2.6                                                                                | 3.2                                                                                 | 3.2                                                                                 |                                                                                     | 3.2                                                                                 | 3.2                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.3                                                                               |                                                                                   | 6.1                                                                               | 6.3                                                                               | 6.3                                                                                | 6.5                                                                                 | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lag                                                                               | Lag                                                                                | Lag                                                                                 | Lead                                                                                |                                                                                     | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             | C-Max                                                                              | None                                                                                | None                                                                                |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                                |                                                                                     | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 18.0                                                                              | 18.0                                                                               |                                                                                     | 18.0                                                                                |                                                                                     |                                                                                     | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 10                                                                                | 10                                                                                 |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 82.0                                                                              | 74.0                                                                              |                                                                                   | 83.6                                                                              | 74.7                                                                              | 74.7                                                                               | 9.6                                                                                 | 13.0                                                                                |                                                                                     | 12.3                                                                                | 20.1                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.63                                                                              | 0.57                                                                              |                                                                                   | 0.64                                                                              | 0.57                                                                              | 0.57                                                                               | 0.07                                                                                | 0.10                                                                                |                                                                                     | 0.09                                                                                | 0.15                                                                                |
| v/c Ratio               |                                                                                   | 0.37                                                                              | 0.54                                                                              |                                                                                   | 0.30                                                                              | 0.66                                                                              | 0.22                                                                               | 0.19                                                                                | 0.23                                                                                |                                                                                     | 0.55                                                                                | 0.40                                                                                |
| Control Delay           |                                                                                   | 16.0                                                                              | 24.0                                                                              |                                                                                   | 12.1                                                                              | 23.7                                                                              | 3.5                                                                                | 58.5                                                                                | 17.6                                                                                |                                                                                     | 62.4                                                                                | 11.1                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 16.0                                                                              | 24.0                                                                              |                                                                                   | 12.1                                                                              | 23.7                                                                              | 3.5                                                                                | 58.5                                                                                | 17.6                                                                                |                                                                                     | 62.4                                                                                | 11.1                                                                                |
| LOS                     |                                                                                   | B                                                                                 | C                                                                                 |                                                                                   | B                                                                                 | C                                                                                 | A                                                                                  | E                                                                                   | B                                                                                   |                                                                                     | E                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 23.4                                                                              |                                                                                   |                                                                                   | 20.5                                                                              |                                                                                    |                                                                                     | 30.2                                                                                |                                                                                     |                                                                                     | 39.4                                                                                |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                    |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | D                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 10.6                                                                              | 94.6                                                                              |                                                                                   | 6.4                                                                               | 108.5                                                                             | 0.5                                                                                | 4.6                                                                                 | 0.5                                                                                 |                                                                                     | 20.9                                                                                | 0.2                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 17.3                                                                              | 148.4                                                                             |                                                                                   | 17.6                                                                              | #199.3                                                                            | 14.3                                                                               | 11.6                                                                                | 9.9                                                                                 |                                                                                     | 31.0                                                                                | 16.3                                                                                |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                    |                                                                                     | 265.2                                                                               |                                                                                     |                                                                                     | 209.8                                                                               |
| Turn Bay Length (m)     |                                                                                   | 80.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 105.0                                                                              | 55.0                                                                                |                                                                                     |                                                                                     | 35.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 267                                                                               | 2005                                                                              |                                                                                   | 332                                                                               | 2033                                                                              | 956                                                                                | 232                                                                                 | 341                                                                                 |                                                                                     | 567                                                                                 | 429                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.31                                                                              | 0.54                                                                              |                                                                                   | 0.27                                                                              | 0.66                                                                              | 0.22                                                                               | 0.09                                                                                | 0.13                                                                                |                                                                                     | 0.31                                                                                | 0.34                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 23.6

Intersection LOS: C

Intersection Capacity Utilization 77.9%

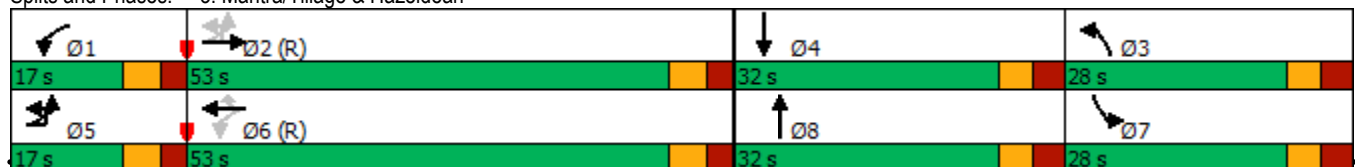
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Mantra/Tillage & Hazeldean





| Lane Group              | SBR |
|-------------------------|-----|
| Minimum Initial (s)     |     |
| Minimum Split (s)       |     |
| Total Split (s)         |     |
| Total Split (%)         |     |
| Maximum Green (s)       |     |
| Yellow Time (s)         |     |
| All-Red Time (s)        |     |
| Lost Time Adjust (s)    |     |
| Total Lost Time (s)     |     |
| Lead/Lag                |     |
| Lead-Lag Optimize?      |     |
| Vehicle Extension (s)   |     |
| Recall Mode             |     |
| Walk Time (s)           |     |
| Flash Dont Walk (s)     |     |
| Pedestrian Calls (#/hr) |     |
| Act Effct Green (s)     |     |
| Actuated g/C Ratio      |     |
| v/c Ratio               |     |
| Control Delay           |     |
| Queue Delay             |     |
| Total Delay             |     |
| LOS                     |     |
| Approach Delay          |     |
| Approach LOS            |     |
| Queue Length 50th (m)   |     |
| Queue Length 95th (m)   |     |
| Internal Link Dist (m)  |     |
| Turn Bay Length (m)     |     |
| Base Capacity (vph)     |     |
| Starvation Cap Reductn  |     |
| Spillback Cap Reductn   |     |
| Storage Cap Reductn     |     |
| Reduced v/c Ratio       |     |
| Intersection Summary    |     |



4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 424                                                                               | 757                                                                               | 260                                                                               | 14                                                                                | 301                                                                               | 950                                                                                | 308                                                                                 | 296                                                                                 | 794                                                                                 | 208                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 2                                                                                 | 424                                                                               | 757                                                                               | 260                                                                               | 14                                                                                | 301                                                                               | 950                                                                                | 308                                                                                 | 296                                                                                 | 794                                                                                 | 208                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.95                                                                              |                                                                                   | 0.99                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 3364                                                                              | 3537                                                                              | 1551                                                                              | 0                                                                                 | 3398                                                                              | 3537                                                                               | 1551                                                                                | 3397                                                                                | 3468                                                                                | 1567                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 3358                                                                              | 3537                                                                              | 1481                                                                              | 0                                                                                 | 3363                                                                              | 3537                                                                               | 1521                                                                                | 3387                                                                                | 3468                                                                                | 1527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 235                                                                               |                                                                                   |                                                                                   |                                                                                    | 174                                                                                 |                                                                                     |                                                                                     | 150                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 24                                                                                |                                                                                   | 24                                                                                |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 3%                                                                                  | 2%                                                                                  | 3%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 424                                                                               | 757                                                                               | 260                                                                               | 14                                                                                | 301                                                                               | 950                                                                                | 308                                                                                 | 296                                                                                 | 794                                                                                 | 208                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 426                                                                               | 757                                                                               | 260                                                                               | 0                                                                                 | 315                                                                               | 950                                                                                | 308                                                                                 | 296                                                                                 | 794                                                                                 | 208                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                            |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                 | SBL                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations        |  |  |  |
| Traffic Volume (vph)       | 315                                                                               | 916                                                                               | 414                                                                               |
| Future Volume (vph)        | 315                                                                               | 916                                                                               | 414                                                                               |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)         | 155.0                                                                             |                                                                                   | 200.0                                                                             |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              |
| Ped Bike Factor            | 0.99                                                                              |                                                                                   | 0.98                                                                              |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)          | 3431                                                                              | 3502                                                                              | 1567                                                                              |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)          | 3407                                                                              | 3502                                                                              | 1537                                                                              |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 264                                                                               |
| Link Speed (k/h)           |                                                                                   | 70                                                                                |                                                                                   |
| Link Distance (m)          |                                                                                   | 316.2                                                                             |                                                                                   |
| Travel Time (s)            |                                                                                   | 16.3                                                                              |                                                                                   |
| Confl. Peds. (#/hr)        | 10                                                                                |                                                                                   | 5                                                                                 |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 2%                                                                                |
| Adj. Flow (vph)            | 315                                                                               | 916                                                                               | 414                                                                               |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)      | 316                                                                               | 916                                                                               | 414                                                                               |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)            |                                                                                   | 10.0                                                                              |                                                                                   |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 | 1                                                                                 |
| Detector Template          | Left                                                                              | Thru                                                                              | Right                                                                             |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              |
| Protected Phases           | 1                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   | 6                                                                                 |
| Detector Phase             | 1                                                                                 | 6                                                                                 | 6                                                                                 |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                               | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                               | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 23.0                                                                              | 23.0                                                                              | 42.0                                                                              | 42.0                                                                              | 23.0                                                                              | 23.0                                                                              | 42.0                                                                               | 42.0                                                                                | 18.0                                                                                | 37.0                                                                                | 37.0                                                                                | 18.0                                                                                |
| Total Split (%)         | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                             | 35.0%                                                                             | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                              | 35.0%                                                                               | 15.0%                                                                               | 30.8%                                                                               | 30.8%                                                                               | 15.0%                                                                               |
| Maximum Green (s)       | 16.5                                                                              | 16.5                                                                              | 35.5                                                                              | 35.5                                                                              | 16.5                                                                              | 16.5                                                                              | 35.5                                                                               | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                | 11.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 24                                                                                | 24                                                                                |                                                                                   |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 16.5                                                                              | 36.1                                                                              | 36.1                                                                              |                                                                                   | 15.2                                                                              | 34.8                                                                               | 34.8                                                                                | 11.8                                                                                | 30.5                                                                                | 30.5                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.30                                                                              | 0.30                                                                              |                                                                                   | 0.13                                                                              | 0.29                                                                               | 0.29                                                                                | 0.10                                                                                | 0.25                                                                                | 0.25                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.92                                                                              | 0.71                                                                              | 0.43                                                                              |                                                                                   | 0.73                                                                              | 0.93                                                                               | 0.55                                                                                | 0.89                                                                                | 0.90                                                                                | 0.42                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 77.8                                                                              | 41.8                                                                              | 8.0                                                                               |                                                                                   | 51.1                                                                              | 65.6                                                                               | 30.6                                                                                | 87.8                                                                                | 50.5                                                                                | 8.7                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 77.8                                                                              | 41.8                                                                              | 8.0                                                                               |                                                                                   | 51.1                                                                              | 65.6                                                                               | 30.6                                                                                | 87.8                                                                                | 50.5                                                                                | 8.9                                                                                 |                                                                                     |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | E                                                                                  | C                                                                                   | F                                                                                   | D                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 46.3                                                                              |                                                                                   |                                                                                   |                                                                                   | 55.8                                                                               |                                                                                     |                                                                                     | 52.3                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | E                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 47.6                                                                              | 77.2                                                                              | 3.9                                                                               |                                                                                   | 34.1                                                                              | 109.2                                                                              | 35.2                                                                                | 27.7                                                                                | 88.5                                                                                | 13.5                                                                                |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | #74.3                                                                             | 97.7                                                                              | 22.7                                                                              |                                                                                   | 48.1                                                                              | #142.6                                                                             | 70.4                                                                                | #58.1                                                                               | #120.0                                                                              | 7.1                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                              |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 462                                                                               | 1065                                                                              | 610                                                                               |                                                                                   | 467                                                                               | 1046                                                                               | 572                                                                                 | 333                                                                                 | 882                                                                                 | 500                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 35                                                                                  |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.92                                                                              | 0.71                                                                              | 0.43                                                                              |                                                                                   | 0.67                                                                              | 0.91                                                                               | 0.54                                                                                | 0.89                                                                                | 0.90                                                                                | 0.45                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 56.9

Intersection LOS: E

Intersection Capacity Utilization 98.7%

ICU Level of Service F

Analysis Period (min) 15

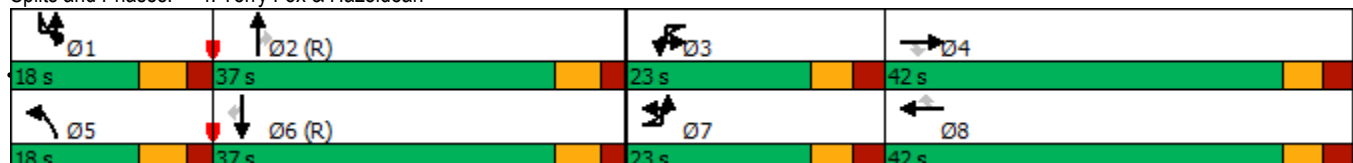
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

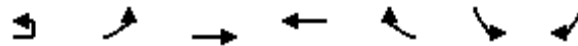
Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean





| Lane Group              | SBL   | SBT    | SBR   |
|-------------------------|-------|--------|-------|
| Switch Phase            |       |        |       |
| Minimum Initial (s)     | 5.0   | 10.0   | 10.0  |
| Minimum Split (s)       | 11.5  | 35.5   | 35.5  |
| Total Split (s)         | 18.0  | 37.0   | 37.0  |
| Total Split (%)         | 15.0% | 30.8%  | 30.8% |
| Maximum Green (s)       | 11.5  | 30.5   | 30.5  |
| Yellow Time (s)         | 4.2   | 4.2    | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3    | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0    | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5    | 6.5   |
| Lead/Lag                | Lead  | Lag    | Lag   |
| Lead-Lag Optimize?      |       |        |       |
| Vehicle Extension (s)   | 3.0   | 3.0    | 3.0   |
| Recall Mode             | None  | C-Max  | C-Max |
| Walk Time (s)           |       | 7.0    | 7.0   |
| Flash Dont Walk (s)     |       | 22.0   | 22.0  |
| Pedestrian Calls (#/hr) |       | 10     | 10    |
| Act Effct Green (s)     | 12.1  | 30.9   | 30.9  |
| Actuated g/C Ratio      | 0.10  | 0.26   | 0.26  |
| v/c Ratio               | 0.91  | 1.02   | 0.70  |
| Control Delay           | 88.0  | 76.8   | 23.5  |
| Queue Delay             | 27.7  | 0.0    | 0.0   |
| Total Delay             | 115.7 | 76.8   | 23.5  |
| LOS                     | F     | E      | C     |
| Approach Delay          |       | 70.9   |       |
| Approach LOS            |       | E      |       |
| Queue Length 50th (m)   | 37.8  | ~94.1  | 16.9  |
| Queue Length 95th (m)   | #63.3 | #145.2 | 74.9  |
| Internal Link Dist (m)  |       | 292.2  |       |
| Turn Bay Length (m)     | 155.0 |        | 200.0 |
| Base Capacity (vph)     | 346   | 902    | 591   |
| Starvation Cap Reductn  | 0     | 0      | 0     |
| Spillback Cap Reductn   | 43    | 0      | 0     |
| Storage Cap Reductn     | 0     | 0      | 0     |
| Reduced v/c Ratio       | 1.04  | 1.02   | 0.70  |
| Intersection Summary    |       |        |       |



| Lane Group                 | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 4     | 78    | 1229  | 1653  | 54    | 99    | 97    |
| Future Volume (vph)        | 4     | 78    | 1229  | 1653  | 54    | 99    | 97    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 35.0  |       |       | 0.0   | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       |       | 0     | 1     | 1     |
| Taper Length (m)           |       | 40.0  |       |       |       | 40.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  |
| Ped Bike Factor            |       |       |       | 1.00  |       | 0.99  | 0.97  |
| Frt                        |       |       |       | 0.995 |       |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1752  | 3537  | 3512  | 0     | 1768  | 1582  |
| Flt Permitted              |       | 0.104 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 192   | 3537  | 3512  | 0     | 1746  | 1533  |
| Right Turn on Red          |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 6     |       |       | 33    |
| Link Speed (k/h)           |       |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 157.6 | 314.8 |       | 401.6 |       |
| Travel Time (s)            |       |       | 9.5   | 18.9  |       | 28.9  |       |
| Confl. Peds. (#/hr)        |       | 17    |       |       | 17    | 10    | 15    |
| Peak Hour Factor           | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 1%    | 2%    | 1%    | 1%    | 1%    | 1%    | 1%    |
| Adj. Flow (vph)            | 4     | 78    | 1229  | 1653  | 54    | 99    | 97    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 82    | 1229  | 1707  | 0     | 99    | 97    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | L NA  | Left  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 8.0   | 4.0   |       | 4.0   |       |
| Link Offset(m)             |       |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 2     |       | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Thru  |       | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 10.0  |       | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 0.6   |       | 2.0   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex | CI+Ex | CI+Ex |       | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       |       | CI+Ex | CI+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | NA    |       | Perm  | Perm  |
| Protected Phases           |       |       | 2     | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       |       |       | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     |       | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |



| Lane Group              | EBU   | EBL   | EBT    | WBT   | WBR | SBL   | SBR   |
|-------------------------|-------|-------|--------|-------|-----|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  | 10.0   | 10.0  |     | 10.0  | 10.0  |
| Minimum Split (s)       | 16.2  | 16.2  | 16.2   | 31.2  |     | 34.1  | 34.1  |
| Total Split (s)         | 86.0  | 86.0  | 86.0   | 86.0  |     | 34.0  | 34.0  |
| Total Split (%)         | 71.7% | 71.7% | 71.7%  | 71.7% |     | 28.3% | 28.3% |
| Maximum Green (s)       | 79.8  | 79.8  | 79.8   | 79.8  |     | 27.9  | 27.9  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7    | 3.7   |     | 3.3   | 3.3   |
| All-Red Time (s)        | 2.5   | 2.5   | 2.5    | 2.5   |     | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0    | 0.0   |     | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.2   | 6.2    | 6.2   |     | 6.1   | 6.1   |
| Lead/Lag                |       |       |        |       |     |       |       |
| Lead-Lag Optimize?      |       |       |        |       |     |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0    | 3.0   |     | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max | C-Max  | C-Max |     | None  | None  |
| Walk Time (s)           |       |       |        | 7.0   |     | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |       |        | 18.0  |     | 21.0  | 21.0  |
| Pedestrian Calls (#/hr) |       |       |        | 17    |     | 15    | 15    |
| Act Effct Green (s)     |       | 90.1  | 90.1   | 90.1  |     | 17.6  | 17.6  |
| Actuated g/C Ratio      |       | 0.75  | 0.75   | 0.75  |     | 0.15  | 0.15  |
| v/c Ratio               |       | 0.57  | 0.46   | 0.65  |     | 0.39  | 0.38  |
| Control Delay           |       | 37.1  | 15.0   | 10.1  |     | 45.9  | 30.2  |
| Queue Delay             |       | 0.0   | 1.6    | 0.0   |     | 0.0   | 0.0   |
| Total Delay             |       | 37.1  | 16.6   | 10.1  |     | 45.9  | 30.2  |
| LOS                     |       | D     | B      | B     |     | D     | C     |
| Approach Delay          |       |       | 17.9   | 10.1  |     | 38.2  |       |
| Approach LOS            |       |       | B      | B     |     | D     |       |
| Queue Length 50th (m)   |       | 8.2   | 91.6   | 62.3  |     | 21.4  | 13.9  |
| Queue Length 95th (m)   |       | m25.3 | m154.1 | 139.6 |     | m28.1 | m21.5 |
| Internal Link Dist (m)  |       |       | 133.6  | 290.8 |     | 377.6 |       |
| Turn Bay Length (m)     |       | 35.0  |        |       |     | 30.0  |       |
| Base Capacity (vph)     |       | 144   | 2655   | 2638  |     | 405   | 381   |
| Starvation Cap Reductn  |       | 0     | 1178   | 0     |     | 0     | 0     |
| Spillback Cap Reductn   |       | 0     | 0      | 0     |     | 0     | 0     |
| Storage Cap Reductn     |       | 0     | 0      | 0     |     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.57  | 0.83   | 0.65  |     | 0.24  | 0.25  |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 10 (8%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 15.0

Intersection LOS: B

Intersection Capacity Utilization 88.1%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Hazeldean & Edgewater



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                  | 1315                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1630                                                                                |
| Future Volume (vph)        | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                  | 1315                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1630                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.98                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                    | 0.993                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1669                                                                              | 1554                                                                              | 0                                                                                 | 1768                                                                              | 1560                                                                              | 0                                                                                 | 1768                                                                               | 3474                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3537                                                                                |
| Flt Permitted              | 0.391                                                                             |                                                                                   |                                                                                   | 0.752                                                                             |                                                                                   |                                                                                   | 0.118                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.123                                                                               |                                                                                     |
| Satd. Flow (perm)          | 684                                                                               | 1554                                                                              | 0                                                                                 | 1391                                                                              | 1560                                                                              | 0                                                                                 | 220                                                                                | 3474                                                                                | 0                                                                                   | 0                                                                                   | 225                                                                                 | 3537                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 129                                                                               |                                                                                   |                                                                                   | 124                                                                               |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                    | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                    | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 7%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 3%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                  | 1315                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1630                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 8                                                                                 | 0                                                                                 | 41                                                                                | 189                                                                               | 0                                                                                 | 2                                                                                  | 1378                                                                                | 0                                                                                   | 0                                                                                   | 165                                                                                 | 1630                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                    | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 29    |
| Future Volume (vph)        | 29    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1551  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1504  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 92    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 3%    |
| Adj. Flow (vph)            | 29    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 29    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |



| Lane Group              | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBU   | SBL   | SBT   |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  |     | 10.0  | 10.0  |     | 5.0   | 10.0  |     | 5.0   | 5.0   | 10.0  |
| Minimum Split (s)       | 36.5  | 36.5  |     | 36.5  | 36.5  |     | 11.6  | 34.5  |     | 11.6  | 11.6  | 34.5  |
| Total Split (s)         | 37.0  | 37.0  |     | 37.0  | 37.0  |     | 14.0  | 69.0  |     | 14.0  | 14.0  | 69.0  |
| Total Split (%)         | 30.8% | 30.8% |     | 30.8% | 30.8% |     | 11.7% | 57.5% |     | 11.7% | 11.7% | 57.5% |
| Maximum Green (s)       | 30.5  | 30.5  |     | 30.5  | 30.5  |     | 7.4   | 62.5  |     | 7.4   | 7.4   | 62.5  |
| Yellow Time (s)         | 3.3   | 3.3   |     | 3.3   | 3.3   |     | 4.2   | 4.2   |     | 4.2   | 4.2   | 4.2   |
| All-Red Time (s)        | 3.2   | 3.2   |     | 3.2   | 3.2   |     | 2.4   | 2.3   |     | 2.4   | 2.4   | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5   |     | 6.5   | 6.5   |     | 6.6   | 6.5   |     |       | 6.6   | 6.5   |
| Lead/Lag                |       |       |     |       |       |     | Lead  | Lag   |     | Lead  | Lead  | Lag   |
| Lead-Lag Optimize?      |       |       |     |       |       |     |       |       |     |       |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |     | None  | None  |     | None  | C-Max |     | None  | None  | C-Max |
| Walk Time (s)           | 7.0   | 7.0   |     | 7.0   | 7.0   |     |       | 7.0   |     |       |       | 7.0   |
| Flash Dont Walk (s)     | 23.0  | 23.0  |     | 23.0  | 23.0  |     |       | 21.0  |     |       |       | 21.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |     | 5     | 5     |     |       | 5     |     |       |       | 5     |
| Act Effct Green (s)     | 15.0  | 15.0  |     | 15.0  | 15.0  |     | 80.7  | 75.2  |     |       | 91.0  | 89.6  |
| Actuated g/C Ratio      | 0.12  | 0.12  |     | 0.12  | 0.12  |     | 0.67  | 0.63  |     |       | 0.76  | 0.75  |
| v/c Ratio               | 0.18  | 0.03  |     | 0.24  | 0.62  |     | 0.01  | 0.63  |     |       | 0.55  | 0.62  |
| Control Delay           | 47.4  | 0.1   |     | 41.1  | 23.4  |     | 5.0   | 8.4   |     |       | 14.9  | 11.1  |
| Queue Delay             | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |       | 0.0   | 0.0   |
| Total Delay             | 47.4  | 0.1   |     | 41.1  | 23.4  |     | 5.0   | 8.4   |     |       | 14.9  | 11.1  |
| LOS                     | D     | A     |     | D     | C     |     | A     | A     |     |       | B     | B     |
| Approach Delay          |       | 31.0  |     |       | 26.5  |     |       | 8.4   |     |       |       | 11.2  |
| Approach LOS            |       | C     |     |       | C     |     |       | A     |     |       |       | B     |
| Queue Length 50th (m)   | 3.1   | 0.0   |     | 8.7   | 16.6  |     | 0.0   | 41.5  |     |       | 6.4   | 55.1  |
| Queue Length 95th (m)   | 7.9   | 0.0   |     | m13.2 | 30.3  |     | m0.2  | 30.7  |     |       | #25.6 | 183.7 |
| Internal Link Dist (m)  |       | 193.1 |     |       | 258.1 |     |       | 229.3 |     |       |       | 336.0 |
| Turn Bay Length (m)     |       |       |     | 65.0  |       |     |       |       |     |       | 55.0  |       |
| Base Capacity (vph)     | 173   | 491   |     | 353   | 488   |     | 246   | 2179  |     |       | 298   | 2640  |
| Starvation Cap Reductn  | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.09  | 0.02  |     | 0.12  | 0.39  |     | 0.01  | 0.63  |     |       | 0.55  | 0.62  |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 46 (38%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 11.3

Intersection LOS: B

Intersection Capacity Utilization 83.0%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 69.0  |
| Total Split (%)         | 57.5% |
| Maximum Green (s)       | 62.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                | Lag   |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 89.6  |
| Actuated g/C Ratio      | 0.75  |
| v/c Ratio               | 0.03  |
| Control Delay           | 0.0   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.0   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.0   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1145  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.03  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBU                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |  |                                                                                     |                                                                                     |  |
| Traffic Volume (vph)       | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1200                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Future Volume (vph)        | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1200                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 35.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 |                                                                                    | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (m)           | 25.0                                                                              |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                    | 10.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                               | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor            | 0.99                                                                              | 0.98                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                    |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                    |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 1768                                                                              | 1552                                                                              | 0                                                                                 | 1488                                                                              | 1552                                                                              | 0                                                                                 | 0                                                                                  | 1768                                                                                | 3457                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                |
| Flt Permitted              | 0.756                                                                             |                                                                                   |                                                                                   | 0.740                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.137                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.210                                                                               |
| Satd. Flow (perm)          | 1398                                                                              | 1552                                                                              | 0                                                                                 | 1152                                                                              | 1552                                                                              | 0                                                                                 | 0                                                                                  | 255                                                                                 | 3457                                                                                | 0                                                                                   | 0                                                                                   | 390                                                                                 |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 126                                                                               |                                                                                   |                                                                                   | 153                                                                               |                                                                                   |                                                                                    |                                                                                     | 3                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   | 207.5                                                                             |                                                                                   |                                                                                   | 88.7                                                                              |                                                                                   |                                                                                    |                                                                                     | 316.2                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   | 14.9                                                                              |                                                                                   |                                                                                   | 10.6                                                                              |                                                                                   |                                                                                    |                                                                                     | 16.3                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 20%                                                                               | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 3%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1200                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 26                                                                                | 0                                                                                 | 5                                                                                 | 3                                                                                 | 0                                                                                 | 0                                                                                  | 39                                                                                  | 1224                                                                                | 0                                                                                   | 0                                                                                   | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                               | Left                                                                                | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 12.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                 | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



| Lane Group                 | SBT   | SBR  |
|----------------------------|-------|------|
| Lane Configurations        | ↑↑    |      |
| Traffic Volume (vph)       | 1474  | 1    |
| Future Volume (vph)        | 1474  | 1    |
| Ideal Flow (vphpl)         | 1800  | 1800 |
| Storage Length (m)         |       | 0.0  |
| Storage Lanes              |       | 0    |
| Taper Length (m)           |       |      |
| Lane Util. Factor          | 0.95  | 0.95 |
| Ped Bike Factor            | 1.00  |      |
| Frt                        |       |      |
| Flt Protected              |       |      |
| Satd. Flow (prot)          | 3537  | 0    |
| Flt Permitted              |       |      |
| Satd. Flow (perm)          | 3537  | 0    |
| Right Turn on Red          |       | Yes  |
| Satd. Flow (RTOR)          |       |      |
| Link Speed (k/h)           | 70    |      |
| Link Distance (m)          | 253.3 |      |
| Travel Time (s)            | 13.0  |      |
| Confl. Peds. (#/hr)        |       | 5    |
| Peak Hour Factor           | 1.00  | 1.00 |
| Heavy Vehicles (%)         | 1%    | 1%   |
| Adj. Flow (vph)            | 1474  | 1    |
| Shared Lane Traffic (%)    |       |      |
| Lane Group Flow (vph)      | 1475  | 0    |
| Enter Blocked Intersection | No    | No   |
| Lane Alignment             | Left  | R NA |
| Median Width(m)            | 12.0  |      |
| Link Offset(m)             | 0.0   |      |
| Crosswalk Width(m)         | 5.0   |      |
| Two way Left Turn Lane     |       |      |
| Headway Factor             | 1.01  | 1.01 |
| Turning Speed (k/h)        |       | 14   |
| Number of Detectors        | 2     |      |
| Detector Template          | Thru  |      |
| Leading Detector (m)       | 10.0  |      |
| Trailing Detector (m)      | 0.0   |      |
| Detector 1 Position(m)     | 0.0   |      |
| Detector 1 Size(m)         | 0.6   |      |
| Detector 1 Type            | CI+Ex |      |
| Detector 1 Channel         |       |      |
| Detector 1 Extend (s)      | 0.0   |      |
| Detector 1 Queue (s)       | 0.0   |      |
| Detector 1 Delay (s)       | 0.0   |      |
| Detector 2 Position(m)     | 9.4   |      |
| Detector 2 Size(m)         | 0.6   |      |
| Detector 2 Type            | CI+Ex |      |
| Detector 2 Channel         |       |      |
| Detector 2 Extend (s)      | 0.0   |      |
| Turn Type                  | NA    |      |
| Protected Phases           | 6     |      |
| Permitted Phases           |       |      |
| Detector Phase             | 6     |      |
| Switch Phase               |       |      |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBU                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 5.0                                                                                | 5.0                                                                                 | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.2                                                                              | 32.2                                                                              |                                                                                   | 11.5                                                                               | 11.5                                                                                | 32.5                                                                                |                                                                                     | 11.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                | 72.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                |
| Total Split (%)         | 27.5%                                                                             | 27.5%                                                                             |                                                                                   | 27.5%                                                                             | 27.5%                                                                             |                                                                                   | 12.5%                                                                              | 12.5%                                                                               | 60.0%                                                                               |                                                                                     | 12.5%                                                                               | 12.5%                                                                               |
| Maximum Green (s)       | 26.8                                                                              | 26.8                                                                              |                                                                                   | 26.8                                                                              | 26.8                                                                              |                                                                                   | 8.5                                                                                | 8.5                                                                                 | 65.5                                                                                |                                                                                     | 8.5                                                                                 | 8.5                                                                                 |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Total Lost Time (s)     | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.2                                                                               | 6.2                                                                               |                                                                                   |                                                                                    | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |                                                                                     | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lead                                                                                | Lag                                                                                 |                                                                                     | Lead                                                                                | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | None                                                                                | C-Max                                                                               |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 7.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Flash Dont Walk (s)     | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                              | 19.0                                                                              |                                                                                   |                                                                                    |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                    |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Act Effct Green (s)     | 13.2                                                                              | 13.2                                                                              |                                                                                   | 13.2                                                                              | 13.2                                                                              |                                                                                   |                                                                                    | 99.6                                                                                | 100.7                                                                               |                                                                                     |                                                                                     | 96.1                                                                                |
| Actuated g/C Ratio      | 0.11                                                                              | 0.11                                                                              |                                                                                   | 0.11                                                                              | 0.11                                                                              |                                                                                   |                                                                                    | 0.83                                                                                | 0.84                                                                                |                                                                                     |                                                                                     | 0.80                                                                                |
| v/c Ratio               | 0.02                                                                              | 0.09                                                                              |                                                                                   | 0.04                                                                              | 0.01                                                                              |                                                                                   |                                                                                    | 0.14                                                                                | 0.42                                                                                |                                                                                     |                                                                                     | 0.01                                                                                |
| Control Delay           | 43.0                                                                              | 0.7                                                                               |                                                                                   | 43.8                                                                              | 0.0                                                                               |                                                                                   |                                                                                    | 2.8                                                                                 | 2.5                                                                                 |                                                                                     |                                                                                     | 5.5                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Total Delay             | 43.0                                                                              | 0.7                                                                               |                                                                                   | 43.8                                                                              | 0.0                                                                               |                                                                                   |                                                                                    | 2.8                                                                                 | 2.5                                                                                 |                                                                                     |                                                                                     | 5.5                                                                                 |
| LOS                     | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | A                                                                                 |                                                                                   |                                                                                    | A                                                                                   | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |
| Approach Delay          |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 27.4                                                                              |                                                                                   |                                                                                    |                                                                                     | 2.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 50th (m)   | 0.6                                                                               | 0.0                                                                               |                                                                                   | 1.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 1.0                                                                                 | 16.6                                                                                |                                                                                     |                                                                                     | 0.1                                                                                 |
| Queue Length 95th (m)   | 2.9                                                                               | 0.0                                                                               |                                                                                   | 4.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | m1.8                                                                                | m25.8                                                                               |                                                                                     |                                                                                     | m0.4                                                                                |
| Internal Link Dist (m)  |                                                                                   | 183.5                                                                             |                                                                                   |                                                                                   | 64.7                                                                              |                                                                                   |                                                                                    |                                                                                     | 292.2                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Turn Bay Length (m)     | 35.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |
| Base Capacity (vph)     | 312                                                                               | 444                                                                               |                                                                                   | 257                                                                               | 465                                                                               |                                                                                   |                                                                                    | 319                                                                                 | 2902                                                                                |                                                                                     |                                                                                     | 415                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       | 0.01                                                                              | 0.06                                                                              |                                                                                   | 0.02                                                                              | 0.01                                                                              |                                                                                   |                                                                                    | 0.12                                                                                | 0.42                                                                                |                                                                                     |                                                                                     | 0.01                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 40 (33%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.52

Intersection Signal Delay: 4.3

Intersection LOS: A

Intersection Capacity Utilization 64.0%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Terry Fox & Tony Graham Rec





| Lane Group              | SBT   | SBR |
|-------------------------|-------|-----|
| Minimum Initial (s)     | 10.0  |     |
| Minimum Split (s)       | 32.5  |     |
| Total Split (s)         | 72.0  |     |
| Total Split (%)         | 60.0% |     |
| Maximum Green (s)       | 65.5  |     |
| Yellow Time (s)         | 4.2   |     |
| All-Red Time (s)        | 2.3   |     |
| Lost Time Adjust (s)    | 0.0   |     |
| Total Lost Time (s)     | 6.5   |     |
| Lead/Lag                | Lag   |     |
| Lead-Lag Optimize?      |       |     |
| Vehicle Extension (s)   | 3.0   |     |
| Recall Mode             | C-Max |     |
| Walk Time (s)           | 7.0   |     |
| Flash Dont Walk (s)     | 19.0  |     |
| Pedestrian Calls (#/hr) | 5     |     |
| Act Effct Green (s)     | 95.4  |     |
| Actuated g/C Ratio      | 0.80  |     |
| v/c Ratio               | 0.52  |     |
| Control Delay           | 5.7   |     |
| Queue Delay             | 0.0   |     |
| Total Delay             | 5.7   |     |
| LOS                     | A     |     |
| Approach Delay          | 5.7   |     |
| Approach LOS            | A     |     |
| Queue Length 50th (m)   | 28.1  |     |
| Queue Length 95th (m)   | 53.6  |     |
| Internal Link Dist (m)  | 229.3 |     |
| Turn Bay Length (m)     |       |     |
| Base Capacity (vph)     | 2810  |     |
| Starvation Cap Reductn  | 0     |     |
| Spillback Cap Reductn   | 0     |     |
| Storage Cap Reductn     | 0     |     |
| Reduced v/c Ratio       | 0.52  |     |
| Intersection Summary    |       |     |

8: Terry Fox & Sobey's  
PM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 987                                                                                 | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1352                                                                                |
| Future Volume (vph)        | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 987                                                                                 | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1352                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 10.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 30.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.91                                                                                | 0.91                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.917                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.989                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.991                                                                               |
| Flt Protected              |                                                                                   | 0.984                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1658                                                                              | 0                                                                                 | 0                                                                                 | 1776                                                                              | 1582                                                                              | 1768                                                                               | 5013                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3495                                                                                |
| Flt Permitted              |                                                                                   | 0.864                                                                             |                                                                                   |                                                                                   | 0.602                                                                             |                                                                                   | 0.148                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.248                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1453                                                                              | 0                                                                                 | 0                                                                                 | 1114                                                                              | 1552                                                                              | 275                                                                                | 5013                                                                                | 0                                                                                   | 0                                                                                   | 460                                                                                 | 3495                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 103                                                                               |                                                                                    | 21                                                                                  |                                                                                     |                                                                                     |                                                                                     | 10                                                                                  |
| Link Speed (k/h)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 132.0                                                                             |                                                                                   |                                                                                   | 152.6                                                                             |                                                                                   |                                                                                    | 140.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 142.7                                                                               |
| Travel Time (s)            |                                                                                   | 15.8                                                                              |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                    | 7.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.3                                                                                 |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 10                                                                                 |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 987                                                                                 | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1352                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 117                                                                               | 0                                                                                 | 0                                                                                 | 80                                                                                | 103                                                                               | 26                                                                                 | 1063                                                                                | 0                                                                                   | 0                                                                                   | 117                                                                                 | 1434                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |

|                            |      |    |
|----------------------------|------|----|
| Lane Group                 | SBR  | Ø9 |
| Lane Configurations        |      |    |
| Traffic Volume (vph)       | 82   |    |
| Future Volume (vph)        | 82   |    |
| Ideal Flow (vphpl)         | 1800 |    |
| Storage Length (m)         | 0.0  |    |
| Storage Lanes              | 0    |    |
| Taper Length (m)           |      |    |
| Lane Util. Factor          | 0.95 |    |
| Ped Bike Factor            |      |    |
| Frt                        |      |    |
| Flt Protected              |      |    |
| Satd. Flow (prot)          | 0    |    |
| Flt Permitted              |      |    |
| Satd. Flow (perm)          | 0    |    |
| Right Turn on Red          | Yes  |    |
| Satd. Flow (RTOR)          |      |    |
| Link Speed (k/h)           |      |    |
| Link Distance (m)          |      |    |
| Travel Time (s)            |      |    |
| Confl. Peds. (#/hr)        | 10   |    |
| Confl. Bikes (#/hr)        | 1    |    |
| Peak Hour Factor           | 1.00 |    |
| Heavy Vehicles (%)         | 1%   |    |
| Adj. Flow (vph)            | 82   |    |
| Shared Lane Traffic (%)    |      |    |
| Lane Group Flow (vph)      | 0    |    |
| Enter Blocked Intersection | No   |    |
| Lane Alignment             | R NA |    |
| Median Width(m)            |      |    |
| Link Offset(m)             |      |    |
| Crosswalk Width(m)         |      |    |
| Two way Left Turn Lane     |      |    |
| Headway Factor             | 1.01 |    |
| Turning Speed (k/h)        | 14   |    |
| Number of Detectors        |      |    |
| Detector Template          |      |    |
| Leading Detector (m)       |      |    |
| Trailing Detector (m)      |      |    |
| Detector 1 Position(m)     |      |    |
| Detector 1 Size(m)         |      |    |
| Detector 1 Type            |      |    |
| Detector 1 Channel         |      |    |
| Detector 1 Extend (s)      |      |    |
| Detector 1 Queue (s)       |      |    |
| Detector 1 Delay (s)       |      |    |
| Detector 2 Position(m)     |      |    |
| Detector 2 Size(m)         |      |    |
| Detector 2 Type            |      |    |
| Detector 2 Channel         |      |    |
| Detector 2 Extend (s)      |      |    |
| Turn Type                  |      |    |
| Protected Phases           | 9    |    |
| Permitted Phases           |      |    |
| Detector Phase             |      |    |



8: Terry Fox & Sobey's  
PM Peak Hour

560 Hazeldean Road  
2029 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 26.0                                                                               | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                | 26.0                                                                                |
| Total Split (s)         | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 84.0                                                                               | 84.0                                                                                |                                                                                     | 84.0                                                                                | 84.0                                                                                | 84.0                                                                                |
| Total Split (%)         | 25.8%                                                                             | 25.8%                                                                             |                                                                                   | 25.8%                                                                             | 25.8%                                                                             | 25.8%                                                                             | 70.0%                                                                              | 70.0%                                                                               |                                                                                     | 70.0%                                                                               | 70.0%                                                                               | 70.0%                                                                               |
| Maximum Green (s)       | 24.0                                                                              | 24.0                                                                              |                                                                                   | 24.0                                                                              | 24.0                                                                              | 24.0                                                                              | 78.0                                                                               | 78.0                                                                                |                                                                                     | 78.0                                                                                | 78.0                                                                                | 78.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 1.8                                                                                | 1.8                                                                                 |                                                                                     | 1.8                                                                                 | 1.8                                                                                 | 1.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               | 6.0                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 6.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 17.0                                                                              | 17.0                                                                              |                                                                                   | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              | 13.0                                                                               | 13.0                                                                                |                                                                                     | 13.0                                                                                | 13.0                                                                                | 13.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  | 10                                                                                  |
| Act Effct Green (s)     |                                                                                   | 14.8                                                                              |                                                                                   |                                                                                   | 14.8                                                                              | 14.8                                                                              | 87.2                                                                               | 87.2                                                                                |                                                                                     |                                                                                     | 87.2                                                                                | 87.2                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.12                                                                              | 0.12                                                                              | 0.73                                                                               | 0.73                                                                                |                                                                                     |                                                                                     | 0.73                                                                                | 0.73                                                                                |
| v/c Ratio               |                                                                                   | 0.50                                                                              |                                                                                   |                                                                                   | 0.58                                                                              | 0.37                                                                              | 0.13                                                                               | 0.29                                                                                |                                                                                     |                                                                                     | 0.35                                                                                | 0.56                                                                                |
| Control Delay           |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 65.2                                                                              | 11.8                                                                              | 6.5                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 3.8                                                                                 | 3.1                                                                                 |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.3                                                                                 |
| Total Delay             |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 65.2                                                                              | 11.8                                                                              | 6.5                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 3.8                                                                                 | 3.4                                                                                 |
| LOS                     |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 | B                                                                                 | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 35.1                                                                              |                                                                                   |                                                                                    | 6.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 3.4                                                                                 |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   | 16.9                                                                              | 0.0                                                                               | 1.9                                                                                | 32.8                                                                                |                                                                                     |                                                                                     | 1.5                                                                                 | 9.5                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 26.0                                                                              |                                                                                   |                                                                                   | 29.2                                                                              | 13.2                                                                              | 5.6                                                                                | 39.0                                                                                |                                                                                     |                                                                                     | m3.7                                                                                | m20.0                                                                               |
| Internal Link Dist (m)  |                                                                                   | 108.0                                                                             |                                                                                   |                                                                                   | 128.6                                                                             |                                                                                   |                                                                                    | 116.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 118.7                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 338                                                                               |                                                                                   |                                                                                   | 222                                                                               | 392                                                                               | 199                                                                                | 3646                                                                                |                                                                                     |                                                                                     | 334                                                                                 | 2541                                                                                |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 427                                                                                 |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.35                                                                              |                                                                                   |                                                                                   | 0.36                                                                              | 0.26                                                                              | 0.13                                                                               | 0.29                                                                                |                                                                                     |                                                                                     | 0.35                                                                                | 0.68                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 22 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 7.5

Intersection LOS: A

Intersection Capacity Utilization 81.6%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Terry Fox & Sobey's





| Lane Group              | SBR | Ø9  |
|-------------------------|-----|-----|
| Switch Phase            |     |     |
| Minimum Initial (s)     |     | 3.0 |
| Minimum Split (s)       |     | 5.0 |
| Total Split (s)         |     | 5.0 |
| Total Split (%)         |     | 4%  |
| Maximum Green (s)       |     | 3.0 |
| Yellow Time (s)         |     | 2.0 |
| All-Red Time (s)        |     | 0.0 |
| Lost Time Adjust (s)    |     |     |
| Total Lost Time (s)     |     |     |
| Lead/Lag                |     |     |
| Lead-Lag Optimize?      |     |     |
| Vehicle Extension (s)   |     | 3.0 |
| Recall Mode             |     | Max |
| Walk Time (s)           |     |     |
| Flash Dont Walk (s)     |     |     |
| Pedestrian Calls (#/hr) |     |     |
| Act Effct Green (s)     |     |     |
| Actuated g/C Ratio      |     |     |
| v/c Ratio               |     |     |
| Control Delay           |     |     |
| Queue Delay             |     |     |
| Total Delay             |     |     |
| LOS                     |     |     |
| Approach Delay          |     |     |
| Approach LOS            |     |     |
| Queue Length 50th (m)   |     |     |
| Queue Length 95th (m)   |     |     |
| Internal Link Dist (m)  |     |     |
| Turn Bay Length (m)     |     |     |
| Base Capacity (vph)     |     |     |
| Starvation Cap Reductn  |     |     |
| Spillback Cap Reductn   |     |     |
| Storage Cap Reductn     |     |     |
| Reduced v/c Ratio       |     |     |
| Intersection Summary    |     |     |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                 | 980                                                                                 | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1315                                                                                |
| Future Volume (vph)        | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                 | 980                                                                                 | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1315                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 15.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 65.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 120.0                                                                               |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 20.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 0.99                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 0.99                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.925                                                                             |                                                                                   |                                                                                   | 0.872                                                                             |                                                                                   |                                                                                    | 0.995                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1701                                                                              | 1701                                                                              | 0                                                                                 | 1768                                                                              | 1598                                                                              | 0                                                                                 | 1768                                                                               | 3512                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3537                                                                                |
| Flt Permitted              | 0.629                                                                             |                                                                                   |                                                                                   | 0.748                                                                             |                                                                                   |                                                                                   | 0.186                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.268                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1120                                                                              | 1701                                                                              | 0                                                                                 | 1376                                                                              | 1598                                                                              | 0                                                                                 | 345                                                                                | 3512                                                                                | 0                                                                                   | 0                                                                                   | 496                                                                                 | 3537                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 7                                                                                 |                                                                                   |                                                                                   | 97                                                                                |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 40                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 65.4                                                                              |                                                                                   |                                                                                   | 381.2                                                                             |                                                                                   |                                                                                    | 479.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 200.7                                                                               |
| Travel Time (s)            |                                                                                   | 4.7                                                                               |                                                                                   |                                                                                   | 34.3                                                                              |                                                                                   |                                                                                    | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     | 10.3                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                 | 10                                                                                 |                                                                                     | 14                                                                                  |                                                                                     | 14                                                                                  |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 5%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                 | 980                                                                                 | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1315                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 23                                                                                | 14                                                                                | 0                                                                                 | 48                                                                                | 114                                                                               | 0                                                                                 | 12                                                                                 | 1014                                                                                | 0                                                                                   | 0                                                                                   | 141                                                                                 | 1315                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        |       |
| Traffic Volume (vph)       | 44    |
| Future Volume (vph)        | 44    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 55.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.95  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1508  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 44    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 10    |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 44    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 44    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 28.3                                                                               | 28.3                                                                                |                                                                                     | 28.3                                                                                | 28.3                                                                                | 28.3                                                                                |
| Total Split (s)         | 38.0                                                                              | 38.0                                                                              |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 82.0                                                                               | 82.0                                                                                |                                                                                     | 82.0                                                                                | 82.0                                                                                | 82.0                                                                                |
| Total Split (%)         | 31.7%                                                                             | 31.7%                                                                             |                                                                                   | 31.7%                                                                             | 31.7%                                                                             |                                                                                   | 68.3%                                                                              | 68.3%                                                                               |                                                                                     | 68.3%                                                                               | 68.3%                                                                               | 68.3%                                                                               |
| Maximum Green (s)       | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 75.7                                                                               | 75.7                                                                                |                                                                                     | 75.7                                                                                | 75.7                                                                                | 75.7                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.1                                                                                | 2.1                                                                                 |                                                                                     | 2.1                                                                                 | 2.1                                                                                 | 2.1                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.3                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 15.0                                                                                |
| Pedestrian Calls (#/hr) | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 14                                                                                 | 14                                                                                  |                                                                                     | 10                                                                                  | 10                                                                                  | 10                                                                                  |
| Act Effct Green (s)     | 14.3                                                                              | 14.3                                                                              |                                                                                   | 14.3                                                                              | 14.3                                                                              |                                                                                   | 93.4                                                                               | 93.4                                                                                |                                                                                     |                                                                                     | 93.4                                                                                | 93.4                                                                                |
| Actuated g/C Ratio      | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.78                                                                               | 0.78                                                                                |                                                                                     |                                                                                     | 0.78                                                                                | 0.78                                                                                |
| v/c Ratio               | 0.17                                                                              | 0.07                                                                              |                                                                                   | 0.29                                                                              | 0.41                                                                              |                                                                                   | 0.04                                                                               | 0.37                                                                                |                                                                                     |                                                                                     | 0.37                                                                                | 0.48                                                                                |
| Control Delay           | 46.9                                                                              | 29.7                                                                              |                                                                                   | 50.1                                                                              | 16.1                                                                              |                                                                                   | 5.7                                                                                | 5.4                                                                                 |                                                                                     |                                                                                     | 15.1                                                                                | 12.9                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 46.9                                                                              | 29.7                                                                              |                                                                                   | 50.1                                                                              | 16.1                                                                              |                                                                                   | 5.7                                                                                | 5.4                                                                                 |                                                                                     |                                                                                     | 15.1                                                                                | 12.9                                                                                |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | B                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 40.4                                                                              |                                                                                   |                                                                                   | 26.2                                                                              |                                                                                   |                                                                                    | 5.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 12.9                                                                                |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 4.8                                                                               | 1.4                                                                               |                                                                                   | 10.1                                                                              | 3.5                                                                               |                                                                                   | 0.4                                                                                | 23.5                                                                                |                                                                                     |                                                                                     | 17.2                                                                                | 87.6                                                                                |
| Queue Length 95th (m)   | 10.2                                                                              | 6.0                                                                               |                                                                                   | 17.4                                                                              | 16.0                                                                              |                                                                                   | 3.1                                                                                | 64.8                                                                                |                                                                                     |                                                                                     | 34.1                                                                                | 116.3                                                                               |
| Internal Link Dist (m)  |                                                                                   | 41.4                                                                              |                                                                                   |                                                                                   | 357.2                                                                             |                                                                                   |                                                                                    | 455.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 176.7                                                                               |
| Turn Bay Length (m)     | 15.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 120.0                                                                               |                                                                                     |
| Base Capacity (vph)     | 298                                                                               | 458                                                                               |                                                                                   | 366                                                                               | 497                                                                               |                                                                                   | 268                                                                                | 2736                                                                                |                                                                                     |                                                                                     | 386                                                                                 | 2754                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.08                                                                              | 0.03                                                                              |                                                                                   | 0.13                                                                              | 0.23                                                                              |                                                                                   | 0.04                                                                               | 0.37                                                                                |                                                                                     |                                                                                     | 0.37                                                                                | 0.48                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 115 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 11.3

Intersection LOS: B

Intersection Capacity Utilization 75.3%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Terry Fox & Halkirk/Winchester



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 28.3  |
| Total Split (s)         | 82.0  |
| Total Split (%)         | 68.3% |
| Maximum Green (s)       | 75.7  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.1   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.3   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 15.0  |
| Pedestrian Calls (#/hr) | 10    |
| Act Effct Green (s)     | 93.4  |
| Actuated g/C Ratio      | 0.78  |
| v/c Ratio               | 0.04  |
| Control Delay           | 5.8   |
| Queue Delay             | 0.0   |
| Total Delay             | 5.8   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 1.3   |
| Queue Length 95th (m)   | m6.5  |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 55.0  |
| Base Capacity (vph)     | 1183  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.04  |
| Intersection Summary    |       |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2029 Background Traffic (demand rationalized)

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 414                                                                               | 757                                                                               | 260                                                                               | 14                                                                                | 301                                                                               | 910                                                                                | 308                                                                                 | 296                                                                                 | 794                                                                                 | 208                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 2                                                                                 | 414                                                                               | 757                                                                               | 260                                                                               | 14                                                                                | 301                                                                               | 910                                                                                | 308                                                                                 | 296                                                                                 | 794                                                                                 | 208                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.95                                                                              |                                                                                   | 0.99                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 3364                                                                              | 3537                                                                              | 1551                                                                              | 0                                                                                 | 3398                                                                              | 3537                                                                               | 1551                                                                                | 3397                                                                                | 3468                                                                                | 1567                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 3358                                                                              | 3537                                                                              | 1481                                                                              | 0                                                                                 | 3363                                                                              | 3537                                                                               | 1521                                                                                | 3386                                                                                | 3468                                                                                | 1527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 237                                                                               |                                                                                   |                                                                                   |                                                                                    | 175                                                                                 |                                                                                     |                                                                                     | 150                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 24                                                                                |                                                                                   | 24                                                                                |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 3%                                                                                  | 2%                                                                                  | 3%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 414                                                                               | 757                                                                               | 260                                                                               | 14                                                                                | 301                                                                               | 910                                                                                | 308                                                                                 | 296                                                                                 | 794                                                                                 | 208                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 416                                                                               | 757                                                                               | 260                                                                               | 0                                                                                 | 315                                                                               | 910                                                                                | 308                                                                                 | 296                                                                                 | 794                                                                                 | 208                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2029 Background Traffic (demand rationalized)

|                            |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                 | SBL                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations        |  |  |  |
| Traffic Volume (vph)       | 305                                                                               | 826                                                                               | 414                                                                               |
| Future Volume (vph)        | 305                                                                               | 826                                                                               | 414                                                                               |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)         | 155.0                                                                             |                                                                                   | 200.0                                                                             |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              |
| Ped Bike Factor            | 0.99                                                                              |                                                                                   | 0.98                                                                              |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)          | 3431                                                                              | 3502                                                                              | 1567                                                                              |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)          | 3407                                                                              | 3502                                                                              | 1537                                                                              |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 265                                                                               |
| Link Speed (k/h)           |                                                                                   | 70                                                                                |                                                                                   |
| Link Distance (m)          |                                                                                   | 316.2                                                                             |                                                                                   |
| Travel Time (s)            |                                                                                   | 16.3                                                                              |                                                                                   |
| Confl. Peds. (#/hr)        | 10                                                                                |                                                                                   | 5                                                                                 |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 2%                                                                                |
| Adj. Flow (vph)            | 305                                                                               | 826                                                                               | 414                                                                               |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)      | 306                                                                               | 826                                                                               | 414                                                                               |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)            |                                                                                   | 10.0                                                                              |                                                                                   |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 | 1                                                                                 |
| Detector Template          | Left                                                                              | Thru                                                                              | Right                                                                             |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              |
| Protected Phases           | 1                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   | 6                                                                                 |
| Detector Phase             | 1                                                                                 | 6                                                                                 | 6                                                                                 |



4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2029 Background Traffic (demand rationalized)

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                               | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                               | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 23.0                                                                              | 23.0                                                                              | 42.0                                                                              | 42.0                                                                              | 23.0                                                                              | 23.0                                                                              | 42.0                                                                               | 42.0                                                                                | 18.0                                                                                | 37.0                                                                                | 37.0                                                                                | 18.0                                                                                |
| Total Split (%)         | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                             | 35.0%                                                                             | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                              | 35.0%                                                                               | 15.0%                                                                               | 30.8%                                                                               | 30.8%                                                                               | 15.0%                                                                               |
| Maximum Green (s)       | 16.5                                                                              | 16.5                                                                              | 35.5                                                                              | 35.5                                                                              | 16.5                                                                              | 16.5                                                                              | 35.5                                                                               | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                | 11.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 24                                                                                | 24                                                                                |                                                                                   |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 16.5                                                                              | 35.6                                                                              | 35.6                                                                              |                                                                                   | 15.2                                                                              | 34.3                                                                               | 34.3                                                                                | 11.9                                                                                | 31.2                                                                                | 31.2                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.30                                                                              | 0.30                                                                              |                                                                                   | 0.13                                                                              | 0.29                                                                               | 0.29                                                                                | 0.10                                                                                | 0.26                                                                                | 0.26                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.90                                                                              | 0.72                                                                              | 0.43                                                                              |                                                                                   | 0.73                                                                              | 0.90                                                                               | 0.55                                                                                | 0.88                                                                                | 0.88                                                                                | 0.41                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 74.9                                                                              | 42.4                                                                              | 7.9                                                                               |                                                                                   | 51.1                                                                              | 63.6                                                                               | 31.0                                                                                | 86.8                                                                                | 48.3                                                                                | 8.6                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 74.9                                                                              | 42.4                                                                              | 7.9                                                                               |                                                                                   | 51.1                                                                              | 63.6                                                                               | 31.0                                                                                | 86.8                                                                                | 48.3                                                                                | 8.7                                                                                 |                                                                                     |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | E                                                                                  | C                                                                                   | F                                                                                   | D                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 45.6                                                                              |                                                                                   |                                                                                   |                                                                                   | 54.5                                                                               |                                                                                     |                                                                                     | 50.7                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 46.4                                                                              | 77.2                                                                              | 3.6                                                                               |                                                                                   | 34.1                                                                              | 104.6                                                                              | 35.0                                                                                | 27.7                                                                                | 88.5                                                                                | 13.5                                                                                |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | #71.8                                                                             | 97.7                                                                              | 22.3                                                                              |                                                                                   | 48.1                                                                              | #132.4                                                                             | 70.2                                                                                | #58.1                                                                               | #120.0                                                                              | 7.1                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                              |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 462                                                                               | 1055                                                                              | 608                                                                               |                                                                                   | 467                                                                               | 1046                                                                               | 573                                                                                 | 336                                                                                 | 900                                                                                 | 507                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 34                                                                                  |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.90                                                                              | 0.72                                                                              | 0.43                                                                              |                                                                                   | 0.67                                                                              | 0.87                                                                               | 0.54                                                                                | 0.88                                                                                | 0.88                                                                                | 0.44                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 52.2

Intersection LOS: D

Intersection Capacity Utilization 97.3%

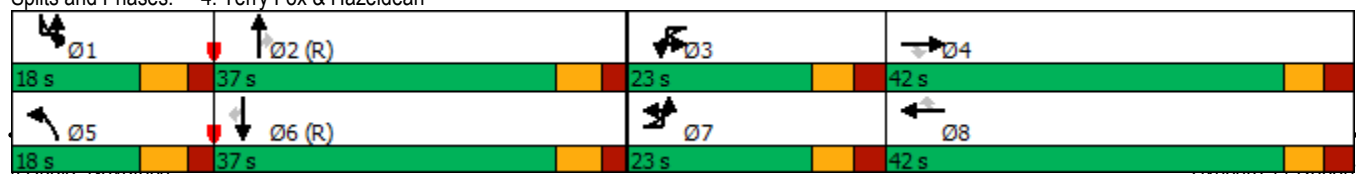
ICU Level of Service F

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean



|                         |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group              | SBL                                                                               | SBT                                                                               | SBR                                                                               |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |
| Minimum Initial (s)     | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              |
| Minimum Split (s)       | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              |
| Total Split (s)         | 18.0                                                                              | 37.0                                                                              | 37.0                                                                              |
| Total Split (%)         | 15.0%                                                                             | 30.8%                                                                             | 30.8%                                                                             |
| Maximum Green (s)       | 11.5                                                                              | 30.5                                                                              | 30.5                                                                              |
| Yellow Time (s)         | 4.2                                                                               | 4.2                                                                               | 4.2                                                                               |
| All-Red Time (s)        | 2.3                                                                               | 2.3                                                                               | 2.3                                                                               |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Total Lost Time (s)     | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |
| Lead/Lag                | Lead                                                                              | Lag                                                                               | Lag                                                                               |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |
| Recall Mode             | None                                                                              | C-Max                                                                             | C-Max                                                                             |
| Walk Time (s)           |                                                                                   | 7.0                                                                               | 7.0                                                                               |
| Flash Dont Walk (s)     |                                                                                   | 22.0                                                                              | 22.0                                                                              |
| Pedestrian Calls (#/hr) |                                                                                   | 10                                                                                | 10                                                                                |
| Act Effct Green (s)     | 12.0                                                                              | 31.3                                                                              | 31.3                                                                              |
| Actuated g/C Ratio      | 0.10                                                                              | 0.26                                                                              | 0.26                                                                              |
| v/c Ratio               | 0.89                                                                              | 0.90                                                                              | 0.69                                                                              |
| Control Delay           | 84.7                                                                              | 56.6                                                                              | 23.3                                                                              |
| Queue Delay             | 21.0                                                                              | 0.0                                                                               | 0.0                                                                               |
| Total Delay             | 105.7                                                                             | 56.6                                                                              | 23.3                                                                              |
| LOS                     | F                                                                                 | E                                                                                 | C                                                                                 |
| Approach Delay          |                                                                                   | 57.4                                                                              |                                                                                   |
| Approach LOS            |                                                                                   | E                                                                                 |                                                                                   |
| Queue Length 50th (m)   | 36.7                                                                              | 65.8                                                                              | 16.7                                                                              |
| Queue Length 95th (m)   | #60.8                                                                             | #122.5                                                                            | 76.4                                                                              |
| Internal Link Dist (m)  |                                                                                   | 292.2                                                                             |                                                                                   |
| Turn Bay Length (m)     | 155.0                                                                             |                                                                                   | 200.0                                                                             |
| Base Capacity (vph)     | 343                                                                               | 913                                                                               | 596                                                                               |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 |
| Spillback Cap Reductn   | 41                                                                                | 0                                                                                 | 0                                                                                 |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 | 0                                                                                 |
| Reduced v/c Ratio       | 1.01                                                                              | 0.90                                                                              | 0.69                                                                              |
| Intersection Summary    |                                                                                   |                                                                                   |                                                                                   |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 3                                                                                 | 332                                                                               | 1064                                                                              | 13                                                                                | 1                                                                                 | 85                                                                                | 687                                                                                | 51                                                                                  | 24                                                                                  | 504                                                                                 | 193                                                                                 | 22                                                                                  |
| Future Volume (vph)        | 3                                                                                 | 332                                                                               | 1064                                                                              | 13                                                                                | 1                                                                                 | 85                                                                                | 687                                                                                | 51                                                                                  | 24                                                                                  | 504                                                                                 | 193                                                                                 | 22                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                    | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                    |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3396                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3370                                                                               | 1551                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3420                                                                              | 3396                                                                              | 0                                                                                 | 0                                                                                 | 3391                                                                              | 3370                                                                               | 1525                                                                                | 1745                                                                                | 3502                                                                                | 1540                                                                                | 3417                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 145                                                                                 |                                                                                     |                                                                                     | 187                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                |                                                                                    |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                              |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                               |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 5%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 6%                                                                                 | 3%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 332                                                                               | 1064                                                                              | 13                                                                                | 1                                                                                 | 85                                                                                | 687                                                                                | 51                                                                                  | 24                                                                                  | 504                                                                                 | 193                                                                                 | 22                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 335                                                                               | 1077                                                                              | 0                                                                                 | 0                                                                                 | 86                                                                                | 687                                                                                | 51                                                                                  | 24                                                                                  | 504                                                                                 | 193                                                                                 | 22                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                  |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                  | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 250   | 134   |
| Future Volume (vph)        | 250   | 134   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 60.0  |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3502  | 1582  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3502  | 1556  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 145   |
| Link Speed (k/h)           | 50    |       |
| Link Distance (m)          | 251.2 |       |
| Travel Time (s)            | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 2%    | 1%    |
| Adj. Flow (vph)            | 250   | 134   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 250   | 134   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | R NA  |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 4     |       |
| Permitted Phases           |       | 4     |
| Detector Phase             | 4     | 4     |
| Switch Phase               |       |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 49.0                                                                              |                                                                                   | 12.0                                                                              | 12.0                                                                              | 45.0                                                                                | 45.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 13.9%                                                                             | 13.9%                                                                             | 42.6%                                                                             |                                                                                   | 10.4%                                                                             | 10.4%                                                                             | 39.1%                                                                               | 39.1%                                                                               | 10.4%                                                                               | 36.5%                                                                               | 36.5%                                                                               | 10.4%                                                                               |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 42.9                                                                              |                                                                                   | 5.9                                                                               | 5.9                                                                               | 38.9                                                                                | 38.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                 | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                               | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                                | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 18.2                                                                              | 62.4                                                                              |                                                                                   |                                                                                   | 7.6                                                                               | 49.3                                                                                | 49.3                                                                                |                                                                                     | 5.8                                                                                 | 24.4                                                                                | 5.8                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.16                                                                              | 0.54                                                                              |                                                                                   |                                                                                   | 0.07                                                                              | 0.43                                                                                | 0.43                                                                                |                                                                                     | 0.05                                                                                | 0.21                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.62                                                                              | 0.59                                                                              |                                                                                   |                                                                                   | 0.39                                                                              | 0.48                                                                                | 0.07                                                                                |                                                                                     | 0.27                                                                                | 0.68                                                                                | 0.13                                                                                |
| Control Delay           |                                                                                   | 51.7                                                                              | 22.9                                                                              |                                                                                   |                                                                                   | 79.5                                                                              | 9.7                                                                                 | 0.5                                                                                 |                                                                                     | 60.6                                                                                | 45.8                                                                                | 7.9                                                                                 |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 51.7                                                                              | 22.9                                                                              |                                                                                   |                                                                                   | 79.5                                                                              | 9.7                                                                                 | 0.5                                                                                 |                                                                                     | 60.6                                                                                | 45.8                                                                                | 7.9                                                                                 |
| LOS                     |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 | A                                                                                   | A                                                                                   |                                                                                     | E                                                                                   | D                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 29.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 16.4                                                                                |                                                                                     |                                                                                     | 36.1                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   | B                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 33.4                                                                              | 74.5                                                                              |                                                                                   |                                                                                   | 9.8                                                                               | 8.4                                                                                 | 0.2                                                                                 |                                                                                     | 4.9                                                                                 | 50.2                                                                                | 1.0                                                                                 |
| Queue Length 95th (m)   |                                                                                   | #65.0                                                                             | 132.2                                                                             |                                                                                   |                                                                                   | 17.7                                                                              | 9.5                                                                                 | 0.0                                                                                 |                                                                                     | 12.9                                                                                | 59.3                                                                                | 15.7                                                                                |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                               |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               |                                                                                     | 100.0                                                                               |                                                                                     | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 542                                                                               | 1841                                                                              |                                                                                   |                                                                                   | 223                                                                               | 1444                                                                                | 736                                                                                 |                                                                                     | 89                                                                                  | 1093                                                                                | 609                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.62                                                                              | 0.59                                                                              |                                                                                   |                                                                                   | 0.39                                                                              | 0.48                                                                                | 0.07                                                                                |                                                                                     | 0.27                                                                                | 0.46                                                                                | 0.13                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 19 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 27.9

Intersection LOS: C

Intersection Capacity Utilization 76.8%

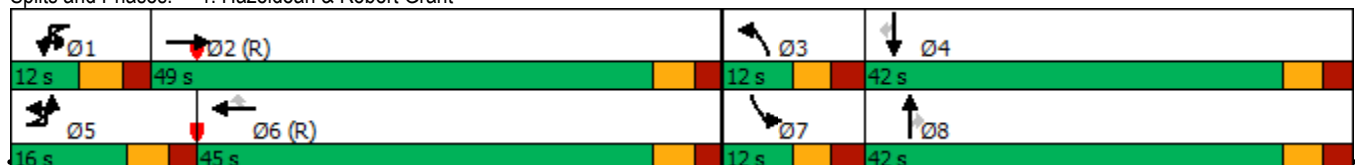
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Hazeldean & Robert Grant





| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 41.1  | 41.1  |
| Total Split (s)         | 42.0  | 42.0  |
| Total Split (%)         | 36.5% | 36.5% |
| Maximum Green (s)       | 35.9  | 35.9  |
| Yellow Time (s)         | 3.3   | 3.3   |
| All-Red Time (s)        | 2.8   | 2.8   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.1   | 6.1   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 28.0  | 28.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 22.0  | 22.0  |
| Actuated g/C Ratio      | 0.19  | 0.19  |
| v/c Ratio               | 0.37  | 0.32  |
| Control Delay           | 40.9  | 6.4   |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 40.9  | 6.4   |
| LOS                     | D     | A     |
| Approach Delay          | 30.3  |       |
| Approach LOS            | C     |       |
| Queue Length 50th (m)   | 26.2  | 0.0   |
| Queue Length 95th (m)   | 30.0  | 10.9  |
| Internal Link Dist (m)  | 227.2 |       |
| Turn Bay Length (m)     |       | 60.0  |
| Base Capacity (vph)     | 1093  | 585   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.23  | 0.23  |
| Intersection Summary    |       |       |

2: Hazeldean & Roger Griffiths  
AM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 1                                                                                 | 107                                                                               | 1018                                                                              | 52                                                                                | 21                                                                                | 805                                                                               | 47                                                                                  | 37                                                                                  | 0                                                                                   | 32                                                                                  | 28                                                                                  | 0                                                                                   |
| Future Volume (vph)        | 1                                                                                 | 107                                                                               | 1018                                                                              | 52                                                                                | 21                                                                                | 805                                                                               | 47                                                                                  | 37                                                                                  | 0                                                                                   | 32                                                                                  | 28                                                                                  | 0                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 75.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 180.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 75.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   | 0.97                                                                                | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                               |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1768                                                                              | 3409                                                                              | 0                                                                                 | 1751                                                                              | 3402                                                                              | 1567                                                                                | 1751                                                                                | 1537                                                                                | 0                                                                                   | 1768                                                                                | 1843                                                                                |
| Flt Permitted              |                                                                                   | 0.301                                                                             |                                                                                   |                                                                                   | 0.267                                                                             |                                                                                   |                                                                                     | 0.757                                                                               |                                                                                     |                                                                                     | 0.736                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 559                                                                               | 3409                                                                              | 0                                                                                 | 491                                                                               | 3402                                                                              | 1518                                                                                | 1386                                                                                | 1537                                                                                | 0                                                                                   | 1361                                                                                | 1843                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 9                                                                                 |                                                                                   |                                                                                   |                                                                                   | 89                                                                                  |                                                                                     | 139                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |
| Link Distance (m)          |                                                                                   |                                                                                   | 297.5                                                                             |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                     |                                                                                     | 259.5                                                                               |                                                                                     |                                                                                     | 237.4                                                                               |
| Travel Time (s)            |                                                                                   |                                                                                   | 17.9                                                                              |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                     |                                                                                     | 18.7                                                                                |                                                                                     |                                                                                     | 17.1                                                                                |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 4%                                                                                | 2%                                                                                | 2%                                                                                | 5%                                                                                | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  | 2%                                                                                  |
| Adj. Flow (vph)            | 1                                                                                 | 107                                                                               | 1018                                                                              | 52                                                                                | 21                                                                                | 805                                                                               | 47                                                                                  | 37                                                                                  | 0                                                                                   | 32                                                                                  | 28                                                                                  | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 108                                                                               | 1070                                                                              | 0                                                                                 | 21                                                                                | 805                                                                               | 47                                                                                  | 37                                                                                  | 32                                                                                  | 0                                                                                   | 28                                                                                  | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                               | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | pm+pt                                                                             | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                                | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                |                                                                                     |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |
| Permitted Phases           | 2                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                   | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 | 6                                                                                   | 8                                                                                   | 8                                                                                   |                                                                                     | 4                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | 7     |
| Traffic Volume (vph)       | 17    |
| Future Volume (vph)        | 17    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 40.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.98  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1552  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 288   |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 17    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 17    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 4     |
| Detector Phase             | 4     |
| Switch Phase               |       |



|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 11.2                                                                              | 11.2                                                                              | 31.3                                                                              |                                                                                   | 31.3                                                                              | 31.3                                                                              | 31.3                                                                               | 31.2                                                                                | 31.2                                                                                |                                                                                     | 31.2                                                                                | 31.2                                                                                |
| Total Split (s)         | 20.0                                                                              | 20.0                                                                              | 82.0                                                                              |                                                                                   | 62.0                                                                              | 62.0                                                                              | 62.0                                                                               | 33.0                                                                                | 33.0                                                                                |                                                                                     | 33.0                                                                                | 33.0                                                                                |
| Total Split (%)         | 17.4%                                                                             | 17.4%                                                                             | 71.3%                                                                             |                                                                                   | 53.9%                                                                             | 53.9%                                                                             | 53.9%                                                                              | 28.7%                                                                               | 28.7%                                                                               |                                                                                     | 28.7%                                                                               | 28.7%                                                                               |
| Maximum Green (s)       | 13.8                                                                              | 13.8                                                                              | 75.7                                                                              |                                                                                   | 55.7                                                                              | 55.7                                                                              | 55.7                                                                               | 26.8                                                                                | 26.8                                                                                |                                                                                     | 26.8                                                                                | 26.8                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.3                                                                                 | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.5                                                                               | 2.5                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                               | 2.6                                                                               | 2.6                                                                                | 2.9                                                                                 | 2.9                                                                                 |                                                                                     | 2.9                                                                                 | 2.9                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.2                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               | 6.3                                                                                | 6.2                                                                                 | 6.2                                                                                 |                                                                                     | 6.2                                                                                 | 6.2                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               | Lag                                                                               | Lag                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | C-Max                                                                             | C-Max                                                                             | C-Max                                                                              | None                                                                                | None                                                                                |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   | 18.0                                                                              | 18.0                                                                              | 18.0                                                                               | 18.0                                                                                | 18.0                                                                                |                                                                                     | 18.0                                                                                | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 92.8                                                                              | 94.0                                                                              |                                                                                   | 79.3                                                                              | 79.3                                                                              | 79.3                                                                               | 13.0                                                                                | 13.0                                                                                |                                                                                     | 13.0                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.81                                                                              | 0.82                                                                              |                                                                                   | 0.69                                                                              | 0.69                                                                              | 0.69                                                                               | 0.11                                                                                | 0.11                                                                                |                                                                                     | 0.11                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.20                                                                              | 0.38                                                                              |                                                                                   | 0.06                                                                              | 0.34                                                                              | 0.04                                                                               | 0.24                                                                                | 0.11                                                                                |                                                                                     | 0.18                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 4.5                                                                               | 3.8                                                                               |                                                                                   | 6.2                                                                               | 9.7                                                                               | 2.2                                                                                | 47.9                                                                                | 0.7                                                                                 |                                                                                     | 46.4                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 4.5                                                                               | 3.8                                                                               |                                                                                   | 6.2                                                                               | 9.7                                                                               | 2.2                                                                                | 47.9                                                                                | 0.7                                                                                 |                                                                                     | 46.4                                                                                |                                                                                     |
| LOS                     |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   | A                                                                                 | A                                                                                 | A                                                                                  | D                                                                                   | A                                                                                   |                                                                                     | D                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 3.8                                                                               |                                                                                   |                                                                                   | 9.2                                                                               |                                                                                    |                                                                                     | 26.0                                                                                |                                                                                     |                                                                                     | 28.9                                                                                |
| Approach LOS            |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                    |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 2.8                                                                               | 15.0                                                                              |                                                                                   | 2.0                                                                               | 57.2                                                                              | 1.6                                                                                | 7.3                                                                                 | 0.0                                                                                 |                                                                                     | 5.5                                                                                 |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | 11.5                                                                              | 42.4                                                                              |                                                                                   | 5.5                                                                               | 98.0                                                                              | 4.1                                                                                | 14.6                                                                                | 0.0                                                                                 |                                                                                     | 11.9                                                                                |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 273.5                                                                             |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                    |                                                                                     | 235.5                                                                               |                                                                                     |                                                                                     | 213.4                                                                               |
| Turn Bay Length (m)     |                                                                                   | 75.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 180.0                                                                              |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 596                                                                               | 2788                                                                              |                                                                                   | 338                                                                               | 2346                                                                              | 1074                                                                               | 322                                                                                 | 464                                                                                 |                                                                                     | 317                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.18                                                                              | 0.38                                                                              |                                                                                   | 0.06                                                                              | 0.34                                                                              | 0.04                                                                               | 0.11                                                                                | 0.07                                                                                |                                                                                     | 0.09                                                                                |                                                                                     |

#### Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 10 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 7.2

Intersection LOS: A

Intersection Capacity Utilization 69.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Hazeldean & Roger Griffiths



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 31.2  |
| Total Split (s)         | 33.0  |
| Total Split (%)         | 28.7% |
| Maximum Green (s)       | 26.8  |
| Yellow Time (s)         | 3.3   |
| All-Red Time (s)        | 2.9   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.2   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | None  |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 18.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 13.0  |
| Actuated g/C Ratio      | 0.11  |
| v/c Ratio               | 0.04  |
| Control Delay           | 0.2   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.2   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.0   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 40.0  |
| Base Capacity (vph)     | 582   |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.03  |
| Intersection Summary    |       |

3: Mantra/Tillage & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |  |
| Traffic Volume (vph)       | 45                                                                                | 987                                                                               | 12                                                                                | 22                                                                                | 751                                                                               | 113                                                                               | 23                                                                                 | 0                                                                                   | 93                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Future Volume (vph)        | 45                                                                                | 987                                                                               | 12                                                                                | 22                                                                                | 751                                                                               | 113                                                                               | 23                                                                                 | 0                                                                                   | 93                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 80.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 105.0                                                                             | 55.0                                                                               |                                                                                     | 0.0                                                                                 | 35.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 2                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)           | 60.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                               |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 0.97                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.97                                                                              | 0.99                                                                               | 0.98                                                                                |                                                                                     | 0.99                                                                                | 0.98                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.858                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 3454                                                                              | 0                                                                                 | 1768                                                                              | 3537                                                                              | 1551                                                                              | 1768                                                                               | 1522                                                                                | 0                                                                                   | 3332                                                                                | 1569                                                                                | 0                                                                                   |
| Flt Permitted              | 0.304                                                                             |                                                                                   |                                                                                   | 0.237                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 564                                                                               | 3454                                                                              | 0                                                                                 | 441                                                                               | 3537                                                                              | 1503                                                                              | 1757                                                                               | 1522                                                                                | 0                                                                                   | 3298                                                                                | 1569                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   | 153                                                                               |                                                                                    | 330                                                                                 |                                                                                     |                                                                                     | 36                                                                                  |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                    | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                    | 289.2                                                                               |                                                                                     |                                                                                     | 233.8                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                    | 20.8                                                                                |                                                                                     |                                                                                     | 16.8                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 16%                                                                               | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                 | 1%                                                                                  | 3%                                                                                  | 4%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 45                                                                                | 987                                                                               | 12                                                                                | 22                                                                                | 751                                                                               | 113                                                                               | 23                                                                                 | 0                                                                                   | 93                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 45                                                                                | 999                                                                               | 0                                                                                 | 22                                                                                | 751                                                                               | 113                                                                               | 23                                                                                 | 93                                                                                  | 0                                                                                   | 74                                                                                  | 38                                                                                  | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | R NA                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |                                                                                     |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                | Perm                                                                              | Prot                                                                               | NA                                                                                  |                                                                                     | Prot                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 3                                                                                  | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector Phase             | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 | 6                                                                                 | 3                                                                                  | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

3: Mantra/Tillage & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                         |  |       |     |       |       |       |       |       |     |       |       |     |
|-------------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Lane Group              | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR   | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Minimum Initial (s)     | 5.0                                                                                | 10.0  |     | 5.0   | 10.0  | 10.0  | 5.0   | 10.0  |     | 5.0   | 10.0  |     |
| Minimum Split (s)       | 11.1                                                                               | 31.3  |     | 11.1  | 31.3  | 31.3  | 11.5  | 31.5  |     | 11.5  | 31.5  |     |
| Total Split (s)         | 12.0                                                                               | 43.0  |     | 12.0  | 43.0  | 43.0  | 28.0  | 32.0  |     | 28.0  | 32.0  |     |
| Total Split (%)         | 10.4%                                                                              | 37.4% |     | 10.4% | 37.4% | 37.4% | 24.3% | 27.8% |     | 24.3% | 27.8% |     |
| Maximum Green (s)       | 5.9                                                                                | 36.7  |     | 5.9   | 36.7  | 36.7  | 21.5  | 25.5  |     | 21.5  | 25.5  |     |
| Yellow Time (s)         | 3.7                                                                                | 3.7   |     | 3.7   | 3.7   | 3.7   | 3.3   | 3.3   |     | 3.3   | 3.3   |     |
| All-Red Time (s)        | 2.4                                                                                | 2.6   |     | 2.4   | 2.6   | 2.6   | 3.2   | 3.2   |     | 3.2   | 3.2   |     |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)     | 6.1                                                                                | 6.3   |     | 6.1   | 6.3   | 6.3   | 6.5   | 6.5   |     | 6.5   | 6.5   |     |
| Lead/Lag                | Lead                                                                               | Lag   |     | Lead  | Lag   | Lag   | Lag   | Lead  |     | Lag   | Lead  |     |
| Lead-Lag Optimize?      |                                                                                    |       |     |       |       |       |       |       |     |       |       |     |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode             | None                                                                               | C-Max |     | None  | C-Max | C-Max | None  | None  |     | None  | None  |     |
| Walk Time (s)           |                                                                                    | 7.0   |     |       | 7.0   | 7.0   |       | 7.0   |     |       | 7.0   |     |
| Flash Dont Walk (s)     |                                                                                    | 18.0  |     |       | 18.0  | 18.0  |       | 18.0  |     |       | 18.0  |     |
| Pedestrian Calls (#/hr) |                                                                                    | 5     |     |       | 5     | 5     |       | 5     |     |       | 5     |     |
| Act Effct Green (s)     | 75.4                                                                               | 72.1  |     | 72.0  | 66.8  | 66.8  | 7.6   | 13.0  |     | 7.9   | 15.7  |     |
| Actuated g/C Ratio      | 0.66                                                                               | 0.63  |     | 0.63  | 0.58  | 0.58  | 0.07  | 0.11  |     | 0.07  | 0.14  |     |
| v/c Ratio               | 0.10                                                                               | 0.46  |     | 0.06  | 0.37  | 0.12  | 0.20  | 0.20  |     | 0.32  | 0.16  |     |
| Control Delay           | 8.0                                                                                | 18.4  |     | 10.0  | 16.3  | 1.6   | 53.7  | 1.0   |     | 54.3  | 15.3  |     |
| Queue Delay             | 0.0                                                                                | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay             | 8.0                                                                                | 18.4  |     | 10.0  | 16.3  | 1.6   | 53.7  | 1.0   |     | 54.3  | 15.3  |     |
| LOS                     | A                                                                                  | B     |     | A     | B     | A     | D     | A     |     | D     | B     |     |
| Approach Delay          |                                                                                    | 18.0  |     |       | 14.2  |       |       | 11.4  |     |       | 41.0  |     |
| Approach LOS            |                                                                                    | B     |     |       | B     |       |       | B     |     |       | D     |     |
| Queue Length 50th (m)   | 5.3                                                                                | 88.3  |     | 1.3   | 42.6  | 0.0   | 4.6   | 0.0   |     | 7.6   | 0.4   |     |
| Queue Length 95th (m)   | 9.4                                                                                | 96.4  |     | 5.7   | 78.1  | 4.6   | 12.0  | 0.0   |     | 14.2  | 8.4   |     |
| Internal Link Dist (m)  |                                                                                    | 263.2 |     |       | 771.2 |       |       | 265.2 |     |       | 209.8 |     |
| Turn Bay Length (m)     | 80.0                                                                               |       |     | 70.0  |       | 105.0 | 55.0  |       |     | 35.0  |       |     |
| Base Capacity (vph)     | 440                                                                                | 2166  |     | 348   | 2054  | 937   | 330   | 594   |     | 622   | 375   |     |
| Starvation Cap Reductn  | 0                                                                                  | 0     |     | 0     | 0     | 0     | 0     | 0     |     | 0     | 0     |     |
| Spillback Cap Reductn   | 0                                                                                  | 0     |     | 0     | 0     | 0     | 0     | 0     |     | 0     | 0     |     |
| Storage Cap Reductn     | 0                                                                                  | 0     |     | 0     | 0     | 0     | 0     | 0     |     | 0     | 0     |     |
| Reduced v/c Ratio       | 0.10                                                                               | 0.46  |     | 0.06  | 0.37  | 0.12  | 0.07  | 0.16  |     | 0.12  | 0.10  |     |

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 98 (85%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.46

Intersection Signal Delay: 17.3

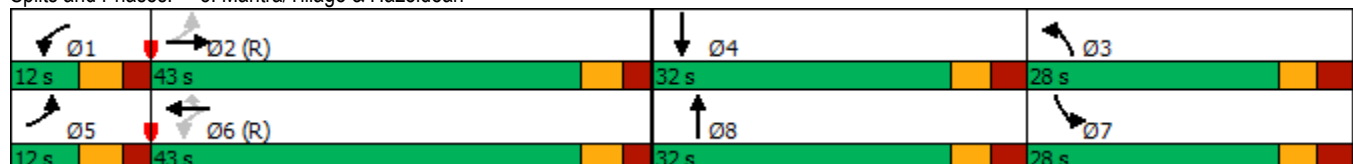
Intersection LOS: B

Intersection Capacity Utilization 59.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: Mantra/Tillage & Hazeldean



4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 262                                                                               | 931                                                                               | 183                                                                               | 5                                                                                 | 141                                                                               | 431                                                                                | 194                                                                                 | 190                                                                                 | 864                                                                                 | 282                                                                                 | 192                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 262                                                                               | 931                                                                               | 183                                                                               | 5                                                                                 | 141                                                                               | 431                                                                                | 194                                                                                 | 190                                                                                 | 864                                                                                 | 282                                                                                 | 192                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     | 75.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.98                                                                              |                                                                                   | 1.00                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3214                                                                              | 3468                                                                              | 1508                                                                              | 0                                                                                 | 3398                                                                              | 3435                                                                               | 1537                                                                                | 3300                                                                                | 3468                                                                                | 1567                                                                                | 3179                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3203                                                                              | 3468                                                                              | 1479                                                                              | 0                                                                                 | 3393                                                                              | 3435                                                                               | 1504                                                                                | 3284                                                                                | 3468                                                                                | 1538                                                                                | 3170                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 183                                                                               |                                                                                   |                                                                                   |                                                                                    | 228                                                                                 |                                                                                     |                                                                                     | 228                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                    | 4                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 8%                                                                                | 3%                                                                                | 6%                                                                                | 1%                                                                                | 2%                                                                                | 4%                                                                                 | 4%                                                                                  | 5%                                                                                  | 3%                                                                                  | 2%                                                                                  | 9%                                                                                  |
| Adj. Flow (vph)            | 7                                                                                 | 262                                                                               | 931                                                                               | 183                                                                               | 5                                                                                 | 141                                                                               | 431                                                                                | 194                                                                                 | 190                                                                                 | 864                                                                                 | 282                                                                                 | 192                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 269                                                                               | 931                                                                               | 183                                                                               | 0                                                                                 | 146                                                                               | 431                                                                                | 194                                                                                 | 190                                                                                 | 864                                                                                 | 282                                                                                 | 192                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 469   | 333   |
| Future Volume (vph)        | 469   | 333   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 200.0 |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3402  | 1508  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3402  | 1481  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 249   |
| Link Speed (k/h)           | 70    |       |
| Link Distance (m)          | 316.2 |       |
| Travel Time (s)            | 16.3  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Confl. Bikes (#/hr)        |       |       |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 5%    | 6%    |
| Adj. Flow (vph)            | 469   | 333   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 469   | 333   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | Right |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | Cl+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 6     |       |
| Permitted Phases           |       | 6     |
| Detector Phase             | 6     | 6     |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                               | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                               | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 21.0                                                                              | 21.0                                                                              | 43.0                                                                              | 43.0                                                                              | 14.0                                                                              | 14.0                                                                              | 36.0                                                                               | 36.0                                                                                | 17.0                                                                                | 36.0                                                                                | 36.0                                                                                | 17.0                                                                                |
| Total Split (%)         | 19.1%                                                                             | 19.1%                                                                             | 39.1%                                                                             | 39.1%                                                                             | 12.7%                                                                             | 12.7%                                                                             | 32.7%                                                                              | 32.7%                                                                               | 15.5%                                                                               | 32.7%                                                                               | 32.7%                                                                               | 15.5%                                                                               |
| Maximum Green (s)       | 14.5                                                                              | 14.5                                                                              | 36.5                                                                              | 36.5                                                                              | 7.5                                                                               | 7.5                                                                               | 29.5                                                                               | 29.5                                                                                | 10.5                                                                                | 29.5                                                                                | 29.5                                                                                | 10.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 13.3                                                                              | 34.1                                                                              | 34.1                                                                              |                                                                                   | 7.5                                                                               | 28.3                                                                               | 28.3                                                                                | 10.2                                                                                | 32.2                                                                                | 32.2                                                                                | 10.2                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              | 0.31                                                                              | 0.31                                                                              |                                                                                   | 0.07                                                                              | 0.26                                                                               | 0.26                                                                                | 0.09                                                                                | 0.29                                                                                | 0.29                                                                                | 0.09                                                                                |
| v/c Ratio               |                                                                                   | 0.69                                                                              | 0.87                                                                              | 0.31                                                                              |                                                                                   | 0.63                                                                              | 0.49                                                                               | 0.35                                                                                | 0.62                                                                                | 0.85                                                                                | 0.46                                                                                | 0.65                                                                                |
| Control Delay           |                                                                                   | 56.1                                                                              | 45.1                                                                              | 5.4                                                                               |                                                                                   | 57.8                                                                              | 38.7                                                                               | 12.5                                                                                | 62.8                                                                                | 38.8                                                                                | 7.4                                                                                 | 53.5                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 56.1                                                                              | 45.1                                                                              | 5.4                                                                               |                                                                                   | 57.8                                                                              | 38.7                                                                               | 12.5                                                                                | 62.8                                                                                | 38.8                                                                                | 7.4                                                                                 | 53.5                                                                                |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | D                                                                                  | B                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   | D                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 42.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 35.7                                                                               |                                                                                     |                                                                                     | 35.6                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 26.3                                                                              | 88.8                                                                              | 0.0                                                                               |                                                                                   | 14.8                                                                              | 42.3                                                                               | 2.8                                                                                 | 12.0                                                                                | 88.3                                                                                | 20.8                                                                                | 19.0                                                                                |
| Queue Length 95th (m)   |                                                                                   | 38.7                                                                              | 110.7                                                                             | 13.5                                                                              |                                                                                   | #24.6                                                                             | 56.0                                                                               | 28.3                                                                                | 31.6                                                                                | #123.0                                                                              | 5.9                                                                                 | 26.1                                                                                |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                              |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Base Capacity (vph)     |                                                                                   | 423                                                                               | 1150                                                                              | 613                                                                               |                                                                                   | 231                                                                               | 921                                                                                | 570                                                                                 | 319                                                                                 | 1014                                                                                | 611                                                                                 | 307                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.64                                                                              | 0.81                                                                              | 0.30                                                                              |                                                                                   | 0.63                                                                              | 0.47                                                                               | 0.34                                                                                | 0.60                                                                                | 0.85                                                                                | 0.46                                                                                | 0.63                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 76 (69%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 36.2

Intersection LOS: D

Intersection Capacity Utilization 84.2%

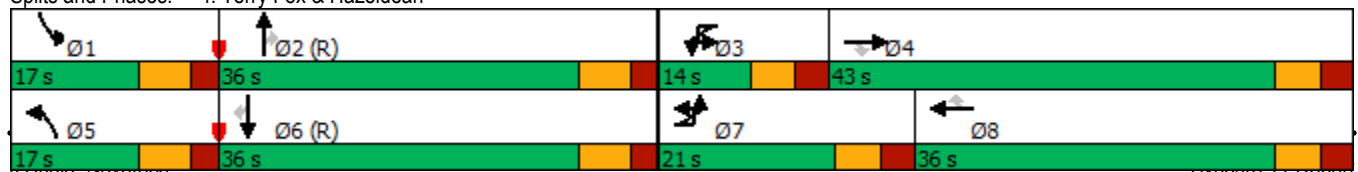
ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean



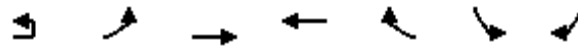
03/10/2021, 11:00 AM

Dynamic 11 Report

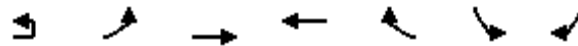


| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Switch Phase            |       |       |
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 35.5  | 35.5  |
| Total Split (s)         | 36.0  | 36.0  |
| Total Split (%)         | 32.7% | 32.7% |
| Maximum Green (s)       | 29.5  | 29.5  |
| Yellow Time (s)         | 4.2   | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 22.0  | 22.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 32.2  | 32.2  |
| Actuated g/C Ratio      | 0.29  | 0.29  |
| v/c Ratio               | 0.47  | 0.55  |
| Control Delay           | 29.5  | 15.4  |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 29.5  | 15.4  |
| LOS                     | C     | B     |
| Approach Delay          | 29.4  |       |
| Approach LOS            | C     |       |
| Queue Length 50th (m)   | 41.6  | 21.7  |
| Queue Length 95th (m)   | 56.3  | 57.1  |
| Internal Link Dist (m)  | 292.2 |       |
| Turn Bay Length (m)     |       | 200.0 |
| Base Capacity (vph)     | 997   | 610   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.47  | 0.55  |
| Intersection Summary    |       |       |





| Lane Group                 | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 4     | 121   | 1098  | 868   | 72    | 74    | 68    |
| Future Volume (vph)        | 4     | 121   | 1098  | 868   | 72    | 74    | 68    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 35.0  |       |       | 0.0   | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       |       | 0     | 1     | 1     |
| Taper Length (m)           |       | 40.0  |       |       |       | 40.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  |
| Ped Bike Factor            |       | 1.00  |       | 1.00  |       | 0.99  | 0.98  |
| Frt                        |       |       |       | 0.989 |       |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1719  | 3468  | 3424  | 0     | 1768  | 1537  |
| Flt Permitted              |       | 0.294 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 529   | 3468  | 3424  | 0     | 1747  | 1500  |
| Right Turn on Red          |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 15    |       |       | 68    |
| Link Speed (k/h)           |       |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 157.6 | 314.8 |       | 401.6 |       |
| Travel Time (s)            |       |       | 9.5   | 18.9  |       | 28.9  |       |
| Confl. Peds. (#/hr)        |       | 10    |       |       | 10    | 10    | 10    |
| Peak Hour Factor           | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 1%    | 4%    | 3%    | 3%    | 1%    | 1%    | 4%    |
| Adj. Flow (vph)            | 4     | 121   | 1098  | 868   | 72    | 74    | 68    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 125   | 1098  | 940   | 0     | 74    | 68    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | L NA  | Left  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 8.0   | 4.0   |       | 4.0   |       |
| Link Offset(m)             |       |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 2     |       | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Thru  |       | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 10.0  |       | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 0.6   |       | 2.0   | 2.0   |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | NA    |       | Perm  | Perm  |
| Protected Phases           |       |       | 2     | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       |       |       | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     |       | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |



| Lane Group              | EBU   | EBL   | EBT   | WBT   | WBR | SBL   | SBR   |
|-------------------------|-------|-------|-------|-------|-----|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  | 10.0  | 10.0  |     | 10.0  | 10.0  |
| Minimum Split (s)       | 16.2  | 16.2  | 16.2  | 31.2  |     | 34.1  | 34.1  |
| Total Split (s)         | 76.0  | 76.0  | 76.0  | 76.0  |     | 34.0  | 34.0  |
| Total Split (%)         | 69.1% | 69.1% | 69.1% | 69.1% |     | 30.9% | 30.9% |
| Maximum Green (s)       | 69.8  | 69.8  | 69.8  | 69.8  |     | 27.9  | 27.9  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7   | 3.7   |     | 3.3   | 3.3   |
| All-Red Time (s)        | 2.5   | 2.5   | 2.5   | 2.5   |     | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.2   | 6.2   | 6.2   |     | 6.1   | 6.1   |
| Lead/Lag                |       |       |       |       |     |       |       |
| Lead-Lag Optimize?      |       |       |       |       |     |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max | C-Max | C-Max |     | None  | None  |
| Walk Time (s)           |       |       |       | 7.0   |     | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |       |       | 18.0  |     | 21.0  | 21.0  |
| Pedestrian Calls (#/hr) |       |       |       | 10    |     | 10    | 10    |
| Act Effct Green (s)     |       | 88.3  | 88.3  | 88.3  |     | 13.9  | 13.9  |
| Actuated g/C Ratio      |       | 0.80  | 0.80  | 0.80  |     | 0.13  | 0.13  |
| v/c Ratio               |       | 0.29  | 0.39  | 0.34  |     | 0.34  | 0.27  |
| Control Delay           |       | 15.7  | 13.3  | 5.0   |     | 61.0  | 24.8  |
| Queue Delay             |       | 0.0   | 0.3   | 0.0   |     | 0.0   | 0.0   |
| Total Delay             |       | 15.7  | 13.6  | 5.0   |     | 61.0  | 24.8  |
| LOS                     |       | B     | B     | A     |     | E     | C     |
| Approach Delay          |       |       | 13.9  | 5.0   |     | 43.7  |       |
| Approach LOS            |       |       | B     | A     |     | D     |       |
| Queue Length 50th (m)   |       | 13.6  | 63.2  | 21.2  |     | 14.7  | 2.6   |
| Queue Length 95th (m)   |       | m27.6 | 112.2 | 56.3  |     | m20.7 | m10.0 |
| Internal Link Dist (m)  |       |       | 133.6 | 290.8 |     | 377.6 |       |
| Turn Bay Length (m)     |       | 35.0  |       |       |     | 30.0  |       |
| Base Capacity (vph)     |       | 424   | 2782  | 2750  |     | 443   | 431   |
| Starvation Cap Reductn  |       | 0     | 960   | 0     |     | 0     | 0     |
| Spillback Cap Reductn   |       | 0     | 0     | 0     |     | 0     | 0     |
| Storage Cap Reductn     |       | 0     | 0     | 0     |     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.29  | 0.60  | 0.34  |     | 0.17  | 0.16  |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 73 (66%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.39

Intersection Signal Delay: 12.1

Intersection LOS: B

Intersection Capacity Utilization 64.2%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Hazeldean & Edgewater



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1434                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1037                                                                                |
| Future Volume (vph)        | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1434                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1037                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.887                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                    | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1317                                                                              | 0                                                                                 | 1567                                                                              | 1516                                                                              | 0                                                                                 | 1768                                                                               | 3489                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3402                                                                                |
| Flt Permitted              | 0.693                                                                             |                                                                                   |                                                                                   | 0.755                                                                             |                                                                                   |                                                                                   | 0.258                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.149                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1284                                                                              | 1317                                                                              | 0                                                                                 | 1238                                                                              | 1516                                                                              | 0                                                                                 | 479                                                                                | 3489                                                                                | 0                                                                                   | 0                                                                                   | 272                                                                                 | 3402                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 43                                                                                |                                                                                   |                                                                                    | 3                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                    | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                    | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 33%                                                                               | 14%                                                                               | 50%                                                                               | 3%                                                                                | 1%                                                                                 | 2%                                                                                  | 3%                                                                                  | 1%                                                                                  | 3%                                                                                  | 5%                                                                                  |
| Adj. Flow (vph)            | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1434                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1037                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 14                                                                                | 4                                                                                 | 0                                                                                 | 14                                                                                | 99                                                                                | 0                                                                                 | 1                                                                                  | 1464                                                                                | 0                                                                                   | 0                                                                                   | 161                                                                                 | 1037                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                    | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        |       |
| Traffic Volume (vph)       | 12    |
| Future Volume (vph)        | 12    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1480  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1436  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 35    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 8%    |
| Adj. Flow (vph)            | 12    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 12    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | Cl+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.5                                                                              | 36.5                                                                              |                                                                                   | 36.5                                                                              | 36.5                                                                              |                                                                                   | 34.5                                                                               | 34.5                                                                                |                                                                                     | 34.5                                                                                | 34.5                                                                                | 34.5                                                                                |
| Total Split (s)         | 37.0                                                                              | 37.0                                                                              |                                                                                   | 37.0                                                                              | 37.0                                                                              |                                                                                   | 73.0                                                                               | 73.0                                                                                |                                                                                     | 73.0                                                                                | 73.0                                                                                | 73.0                                                                                |
| Total Split (%)         | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 66.4%                                                                              | 66.4%                                                                               |                                                                                     | 66.4%                                                                               | 66.4%                                                                               | 66.4%                                                                               |
| Maximum Green (s)       | 30.5                                                                              | 30.5                                                                              |                                                                                   | 30.5                                                                              | 30.5                                                                              |                                                                                   | 66.5                                                                               | 66.5                                                                                |                                                                                     | 66.5                                                                                | 66.5                                                                                | 66.5                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 3.2                                                                               | 3.2                                                                               |                                                                                   | 3.2                                                                               | 3.2                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                                | 6.5                                                                                 |                                                                                     |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 21.0                                                                                | 21.0                                                                                | 21.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 14.4                                                                              | 14.4                                                                              |                                                                                   | 14.4                                                                              | 14.4                                                                              |                                                                                   | 82.6                                                                               | 82.6                                                                                |                                                                                     |                                                                                     | 82.6                                                                                | 82.6                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.75                                                                               | 0.75                                                                                |                                                                                     |                                                                                     | 0.75                                                                                | 0.75                                                                                |
| v/c Ratio               | 0.08                                                                              | 0.02                                                                              |                                                                                   | 0.09                                                                              | 0.42                                                                              |                                                                                   | 0.00                                                                               | 0.56                                                                                |                                                                                     |                                                                                     | 0.79                                                                                | 0.41                                                                                |
| Control Delay           | 38.6                                                                              | 25.2                                                                              |                                                                                   | 61.5                                                                              | 51.0                                                                              |                                                                                   | 3.0                                                                                | 5.3                                                                                 |                                                                                     |                                                                                     | 41.6                                                                                | 6.5                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 38.6                                                                              | 25.2                                                                              |                                                                                   | 61.5                                                                              | 51.0                                                                              |                                                                                   | 3.0                                                                                | 5.3                                                                                 |                                                                                     |                                                                                     | 41.6                                                                                | 6.5                                                                                 |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | E                                                                                 | D                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | D                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 35.7                                                                              |                                                                                   |                                                                                   | 52.3                                                                              |                                                                                   |                                                                                    | 5.3                                                                                 |                                                                                     |                                                                                     |                                                                                     | 11.1                                                                                |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 2.6                                                                               | 0.2                                                                               |                                                                                   | 3.0                                                                               | 13.5                                                                              |                                                                                   | 0.0                                                                                | 4.7                                                                                 |                                                                                     |                                                                                     | 13.1                                                                                | 25.9                                                                                |
| Queue Length 95th (m)   | 6.6                                                                               | 2.6                                                                               |                                                                                   | m9.2                                                                              | 31.4                                                                              |                                                                                   | m0.1                                                                               | 26.2                                                                                |                                                                                     |                                                                                     | #69.8                                                                               | 70.8                                                                                |
| Internal Link Dist (m)  |                                                                                   | 193.1                                                                             |                                                                                   |                                                                                   | 258.1                                                                             |                                                                                   |                                                                                    | 229.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 336.0                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 65.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |                                                                                     |
| Base Capacity (vph)     | 356                                                                               | 367                                                                               |                                                                                   | 343                                                                               | 451                                                                               |                                                                                   | 359                                                                                | 2622                                                                                |                                                                                     |                                                                                     | 204                                                                                 | 2555                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.04                                                                              | 0.01                                                                              |                                                                                   | 0.04                                                                              | 0.22                                                                              |                                                                                   | 0.00                                                                               | 0.56                                                                                |                                                                                     |                                                                                     | 0.79                                                                                | 0.41                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 16 (15%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 9.9

Intersection LOS: A

Intersection Capacity Utilization 79.4%

ICU Level of Service D

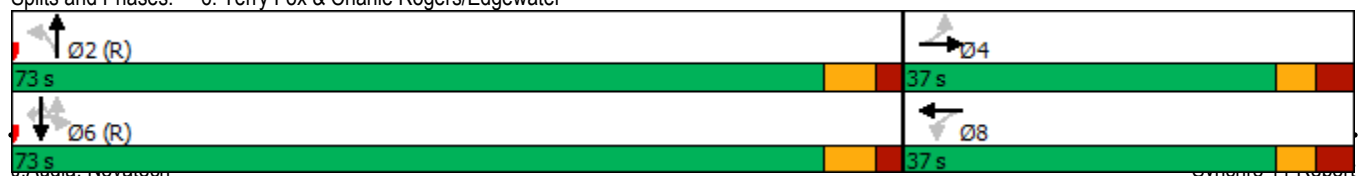
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 73.0  |
| Total Split (%)         | 66.4% |
| Maximum Green (s)       | 66.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 82.6  |
| Actuated g/C Ratio      | 0.75  |
| v/c Ratio               | 0.01  |
| Control Delay           | 0.2   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.2   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.5   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1087  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (vph)       | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                  | 1302                                                                                | 1                                                                                   | 0                                                                                   | 871                                                                                 | 0                                                                                   |
| Future Volume (vph)        | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                  | 1302                                                                                | 1                                                                                   | 0                                                                                   | 871                                                                                 | 0                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 35.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 55.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)           | 25.0                                                                              |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.98                                                                              |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 1.00                                                                                | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1861                                                                              | 1553                                                                              | 0                                                                                 | 1768                                                                              | 1861                                                                              | 0                                                                                 | 1768                                                                                | 3468                                                                                | 0                                                                                   | 1861                                                                                | 3370                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   | 0.769                                                                             |                                                                                   |                                                                                   | 0.326                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1861                                                                              | 1553                                                                              | 0                                                                                 | 1422                                                                              | 1861                                                                              | 0                                                                                 | 605                                                                                 | 3468                                                                                | 0                                                                                   | 1861                                                                                | 3370                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 180                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 207.5                                                                             |                                                                                   |                                                                                   | 88.7                                                                              |                                                                                   |                                                                                     | 316.2                                                                               |                                                                                     |                                                                                     | 253.3                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 14.9                                                                              |                                                                                   |                                                                                   | 10.6                                                                              |                                                                                   |                                                                                     | 16.3                                                                                |                                                                                     |                                                                                     | 13.0                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                  | 3%                                                                                  | 1%                                                                                  | 1%                                                                                  | 6%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                  | 1302                                                                                | 1                                                                                   | 0                                                                                   | 871                                                                                 | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 3                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                  | 1303                                                                                | 0                                                                                   | 0                                                                                   | 871                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                                | Left                                                                                | Right                                                                               | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                     | 12.0                                                                                |                                                                                     |                                                                                     | 12.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |                                                                                     |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              |                                                                                   |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.5                                                                               | 32.5                                                                                |                                                                                     | 32.5                                                                                | 32.5                                                                                |                                                                                     |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              |                                                                                   | 77.0                                                                               | 77.0                                                                                |                                                                                     | 77.0                                                                                | 77.0                                                                                |                                                                                     |
| Total Split (%)         | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 70.0%                                                                              | 70.0%                                                                               |                                                                                     | 70.0%                                                                               | 70.0%                                                                               |                                                                                     |
| Maximum Green (s)       | 26.8                                                                              | 26.8                                                                              |                                                                                   | 26.8                                                                              | 26.8                                                                              |                                                                                   | 70.5                                                                               | 70.5                                                                                |                                                                                     | 70.5                                                                                | 70.5                                                                                |                                                                                     |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 |                                                                                     |
| All-Red Time (s)        | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.5                                                                                | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                               | 19.0                                                                                |                                                                                     | 19.0                                                                                | 19.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 13.2                                                                              |                                                                                   | 13.2                                                                              |                                                                                   |                                                                                   | 102.3                                                                              | 102.3                                                                               |                                                                                     |                                                                                     | 102.3                                                                               |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.93                                                                               | 0.93                                                                                |                                                                                     |                                                                                     | 0.93                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.01                                                                              |                                                                                   | 0.01                                                                              |                                                                                   |                                                                                   | 0.02                                                                               | 0.40                                                                                |                                                                                     |                                                                                     | 0.28                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 0.0                                                                               |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                   | 9.4                                                                                | 9.0                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 0.0                                                                               |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                   | 9.4                                                                                | 9.0                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| LOS                     |                                                                                   | A                                                                                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                    | 9.0                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 0.0                                                                               |                                                                                   | 0.2                                                                               |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | 0.0                                                                               |                                                                                   | 1.4                                                                               |                                                                                   |                                                                                   | m2.1                                                                               | 150.5                                                                               |                                                                                     |                                                                                     | 1.6                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   | 183.5                                                                             |                                                                                   |                                                                                   | 64.7                                                                              |                                                                                   |                                                                                    | 292.2                                                                               |                                                                                     |                                                                                     | 229.3                                                                               |                                                                                     |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 514                                                                               |                                                                                   | 346                                                                               |                                                                                   |                                                                                   | 562                                                                                | 3224                                                                                |                                                                                     |                                                                                     | 3133                                                                                |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.01                                                                              |                                                                                   | 0.00                                                                              |                                                                                   |                                                                                   | 0.02                                                                               | 0.40                                                                                |                                                                                     |                                                                                     | 0.28                                                                                |                                                                                     |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 26 (24%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.40

Intersection Signal Delay: 5.5

Intersection LOS: A

Intersection Capacity Utilization 59.0%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Terry Fox & Tony Graham Rec





8: Terry Fox & Sobey's  
AM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1287                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 774                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1287                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 774                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 10.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 30.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.91                                                                                | 0.91                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              | 0.98                                                                              | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.910                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.994                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.997                                                                               |
| Flt Protected              |                                                                                   | 0.986                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1526                                                                              | 0                                                                                 | 0                                                                                 | 1742                                                                              | 1567                                                                              | 1581                                                                               | 5042                                                                                | 0                                                                                   | 0                                                                                   | 1722                                                                                | 3424                                                                                |
| Flt Permitted              |                                                                                   | 0.899                                                                             |                                                                                   |                                                                                   | 0.715                                                                             |                                                                                   | 0.304                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.192                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1389                                                                              | 0                                                                                 | 0                                                                                 | 1297                                                                              | 1537                                                                              | 504                                                                                | 5042                                                                                | 0                                                                                   | 0                                                                                   | 347                                                                                 | 3424                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 16                                                                                |                                                                                   |                                                                                   |                                                                                   | 109                                                                               |                                                                                    | 10                                                                                  |                                                                                     |                                                                                     |                                                                                     | 3                                                                                   |
| Link Speed (k/h)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 132.0                                                                             |                                                                                   |                                                                                   | 152.6                                                                             |                                                                                   |                                                                                    | 140.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 142.7                                                                               |
| Travel Time (s)            |                                                                                   | 15.8                                                                              |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                    | 7.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.3                                                                                 |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 29%                                                                               | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 13%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 4%                                                                                  | 4%                                                                                  |
| Adj. Flow (vph)            | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1287                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 774                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 24                                                                                | 0                                                                                 | 0                                                                                 | 31                                                                                | 52                                                                                | 8                                                                                  | 1339                                                                                | 0                                                                                   | 0                                                                                   | 31                                                                                  | 792                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                              | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 5                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |

|                            |      |    |
|----------------------------|------|----|
| Lane Group                 | SBR  | Ø9 |
| Lane Configurations        |      |    |
| Traffic Volume (vph)       | 18   |    |
| Future Volume (vph)        | 18   |    |
| Ideal Flow (vphpl)         | 1800 |    |
| Storage Length (m)         | 0.0  |    |
| Storage Lanes              | 0    |    |
| Taper Length (m)           |      |    |
| Lane Util. Factor          | 0.95 |    |
| Ped Bike Factor            |      |    |
| Frt                        |      |    |
| Flt Protected              |      |    |
| Satd. Flow (prot)          | 0    |    |
| Flt Permitted              |      |    |
| Satd. Flow (perm)          | 0    |    |
| Right Turn on Red          | Yes  |    |
| Satd. Flow (RTOR)          |      |    |
| Link Speed (k/h)           |      |    |
| Link Distance (m)          |      |    |
| Travel Time (s)            |      |    |
| Confl. Peds. (#/hr)        | 5    |    |
| Confl. Bikes (#/hr)        |      |    |
| Peak Hour Factor           | 1.00 |    |
| Heavy Vehicles (%)         | 1%   |    |
| Adj. Flow (vph)            | 18   |    |
| Shared Lane Traffic (%)    |      |    |
| Lane Group Flow (vph)      | 0    |    |
| Enter Blocked Intersection | No   |    |
| Lane Alignment             | R NA |    |
| Median Width(m)            |      |    |
| Link Offset(m)             |      |    |
| Crosswalk Width(m)         |      |    |
| Two way Left Turn Lane     |      |    |
| Headway Factor             | 1.01 |    |
| Turning Speed (k/h)        | 14   |    |
| Number of Detectors        |      |    |
| Detector Template          |      |    |
| Leading Detector (m)       |      |    |
| Trailing Detector (m)      |      |    |
| Detector 1 Position(m)     |      |    |
| Detector 1 Size(m)         |      |    |
| Detector 1 Type            |      |    |
| Detector 1 Channel         |      |    |
| Detector 1 Extend (s)      |      |    |
| Detector 1 Queue (s)       |      |    |
| Detector 1 Delay (s)       |      |    |
| Detector 2 Position(m)     |      |    |
| Detector 2 Size(m)         |      |    |
| Detector 2 Type            |      |    |
| Detector 2 Channel         |      |    |
| Detector 2 Extend (s)      |      |    |
| Turn Type                  |      |    |
| Protected Phases           | 9    |    |
| Permitted Phases           |      |    |
| Detector Phase             |      |    |

8: Terry Fox & Sobey's  
AM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 5.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 11.2                                                                               | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                | 26.0                                                                                |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 15.0                                                                               | 72.0                                                                                |                                                                                     | 57.0                                                                                | 57.0                                                                                | 57.0                                                                                |
| Total Split (%)         | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 30.0%                                                                             | 30.0%                                                                             | 30.0%                                                                             | 13.6%                                                                              | 65.5%                                                                               |                                                                                     | 51.8%                                                                               | 51.8%                                                                               | 51.8%                                                                               |
| Maximum Green (s)       | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 9.0                                                                                | 66.0                                                                                |                                                                                     | 51.0                                                                                | 51.0                                                                                | 51.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 1.8                                                                                | 1.8                                                                                 |                                                                                     | 1.8                                                                                 | 1.8                                                                                 | 1.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               | 6.0                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 6.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               |                                                                                    | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 17.0                                                                              | 17.0                                                                              |                                                                                   | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              |                                                                                    | 13.0                                                                                |                                                                                     | 13.0                                                                                | 13.0                                                                                | 13.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 |                                                                                    | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 12.8                                                                              |                                                                                   |                                                                                   | 12.8                                                                              | 12.8                                                                              | 82.6                                                                               | 82.6                                                                                |                                                                                     |                                                                                     | 80.2                                                                                | 80.2                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.12                                                                              | 0.12                                                                              | 0.75                                                                               | 0.75                                                                                |                                                                                     |                                                                                     | 0.73                                                                                | 0.73                                                                                |
| v/c Ratio               |                                                                                   | 0.14                                                                              |                                                                                   |                                                                                   | 0.21                                                                              | 0.19                                                                              | 0.02                                                                               | 0.35                                                                                |                                                                                     |                                                                                     | 0.12                                                                                | 0.32                                                                                |
| Control Delay           |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              | 1.5                                                                               | 2.6                                                                                | 4.1                                                                                 |                                                                                     |                                                                                     | 4.4                                                                                 | 2.7                                                                                 |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              | 1.5                                                                               | 2.6                                                                                | 4.1                                                                                 |                                                                                     |                                                                                     | 4.4                                                                                 | 2.8                                                                                 |
| LOS                     |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 | A                                                                                 | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 17.8                                                                              |                                                                                   |                                                                                    | 4.1                                                                                 |                                                                                     |                                                                                     |                                                                                     | 2.8                                                                                 |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 1.5                                                                               |                                                                                   |                                                                                   | 5.8                                                                               | 0.0                                                                               | 0.3                                                                                | 38.4                                                                                |                                                                                     |                                                                                     | 0.4                                                                                 | 4.8                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 12.4                                                                              | 0.0                                                                               | m0.3                                                                               | 26.1                                                                                |                                                                                     |                                                                                     | m2.3                                                                                | 17.5                                                                                |
| Internal Link Dist (m)  |                                                                                   | 108.0                                                                             |                                                                                   |                                                                                   | 128.6                                                                             |                                                                                   |                                                                                    | 116.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 118.7                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 306                                                                               | 446                                                                               | 466                                                                                | 3788                                                                                |                                                                                     |                                                                                     | 252                                                                                 | 2496                                                                                |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 364                                                                                 |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.07                                                                              |                                                                                   |                                                                                   | 0.10                                                                              | 0.12                                                                              | 0.02                                                                               | 0.35                                                                                |                                                                                     |                                                                                     | 0.12                                                                                | 0.37                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 80 (73%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.35

Intersection Signal Delay: 4.3

Intersection LOS: A

Intersection Capacity Utilization 64.4%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Terry Fox & Sobey's



|                         |     |     |
|-------------------------|-----|-----|
| Lane Group              | SBR | Ø9  |
| Switch Phase            |     |     |
| Minimum Initial (s)     |     | 3.0 |
| Minimum Split (s)       |     | 5.0 |
| Total Split (s)         |     | 5.0 |
| Total Split (%)         |     | 5%  |
| Maximum Green (s)       |     | 3.0 |
| Yellow Time (s)         |     | 2.0 |
| All-Red Time (s)        |     | 0.0 |
| Lost Time Adjust (s)    |     |     |
| Total Lost Time (s)     |     |     |
| Lead/Lag                |     |     |
| Lead-Lag Optimize?      |     |     |
| Vehicle Extension (s)   |     | 3.0 |
| Recall Mode             |     | Max |
| Walk Time (s)           |     |     |
| Flash Dont Walk (s)     |     |     |
| Pedestrian Calls (#/hr) |     |     |
| Act Effct Green (s)     |     |     |
| Actuated g/C Ratio      |     |     |
| v/c Ratio               |     |     |
| Control Delay           |     |     |
| Queue Delay             |     |     |
| Total Delay             |     |     |
| LOS                     |     |     |
| Approach Delay          |     |     |
| Approach LOS            |     |     |
| Queue Length 50th (m)   |     |     |
| Queue Length 95th (m)   |     |     |
| Internal Link Dist (m)  |     |     |
| Turn Bay Length (m)     |     |     |
| Base Capacity (vph)     |     |     |
| Starvation Cap Reductn  |     |     |
| Spillback Cap Reductn   |     |     |
| Storage Cap Reductn     |     |     |
| Reduced v/c Ratio       |     |     |
| Intersection Summary    |     |     |

9: Terry Fox & Halkirk/Winchester  
AM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                  | 1276                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 714                                                                                 |
| Future Volume (vph)        | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                  | 1276                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 714                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 15.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 65.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 120.0                                                                               |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 20.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.910                                                                             |                                                                                   |                                                                                   | 0.857                                                                             |                                                                                   |                                                                                    | 0.995                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1462                                                                              | 0                                                                                 | 1734                                                                              | 1555                                                                              | 0                                                                                 | 1069                                                                               | 3481                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3435                                                                                |
| Flt Permitted              | 0.689                                                                             |                                                                                   |                                                                                   | 0.741                                                                             |                                                                                   |                                                                                   | 0.377                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.183                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1276                                                                              | 1462                                                                              | 0                                                                                 | 1345                                                                              | 1555                                                                              | 0                                                                                 | 423                                                                                | 3481                                                                                | 0                                                                                   | 0                                                                                   | 340                                                                                 | 3435                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 15                                                                                |                                                                                   |                                                                                   | 57                                                                                |                                                                                   |                                                                                    | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 40                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 65.4                                                                              |                                                                                   |                                                                                   | 381.2                                                                             |                                                                                   |                                                                                    | 479.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 200.7                                                                               |
| Travel Time (s)            |                                                                                   | 4.7                                                                               |                                                                                   |                                                                                   | 34.3                                                                              |                                                                                   |                                                                                    | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     | 10.3                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 10                                                                                  |                                                                                     | 10                                                                                  |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 20%                                                                               | 13%                                                                               | 3%                                                                                | 20%                                                                               | 1%                                                                                | 67%                                                                                | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 4%                                                                                  |
| Adj. Flow (vph)            | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                  | 1276                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 714                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 20                                                                                | 25                                                                                | 0                                                                                 | 30                                                                                | 106                                                                               | 0                                                                                 | 6                                                                                  | 1317                                                                                | 0                                                                                   | 0                                                                                   | 77                                                                                  | 714                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                              | CI+Ex                                                                               |                                                                                     | CI+Ex                                                                               | CI+Ex                                                                               | CI+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                    | CI+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | CI+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | 7     |
| Traffic Volume (vph)       | 10    |
| Future Volume (vph)        | 10    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 55.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1531  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 30    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 10    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 10    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | Cl+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

9: Terry Fox & Halkirk/Winchester  
AM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 28.3                                                                               | 28.3                                                                                |                                                                                     | 28.3                                                                                | 28.3                                                                                | 28.3                                                                                |
| Total Split (s)         | 38.0                                                                              | 38.0                                                                              |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 72.0                                                                               | 72.0                                                                                |                                                                                     | 72.0                                                                                | 72.0                                                                                | 72.0                                                                                |
| Total Split (%)         | 34.5%                                                                             | 34.5%                                                                             |                                                                                   | 34.5%                                                                             | 34.5%                                                                             |                                                                                   | 65.5%                                                                              | 65.5%                                                                               |                                                                                     | 65.5%                                                                               | 65.5%                                                                               | 65.5%                                                                               |
| Maximum Green (s)       | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 65.7                                                                               | 65.7                                                                                |                                                                                     | 65.7                                                                                | 65.7                                                                                | 65.7                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.1                                                                                | 2.1                                                                                 |                                                                                     | 2.1                                                                                 | 2.1                                                                                 | 2.1                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.3                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 15.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 10                                                                                 | 10                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 14.2                                                                              | 14.2                                                                              |                                                                                   | 14.2                                                                              | 14.2                                                                              |                                                                                   | 83.5                                                                               | 83.5                                                                                |                                                                                     |                                                                                     | 83.5                                                                                | 83.5                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.76                                                                               | 0.76                                                                                |                                                                                     |                                                                                     | 0.76                                                                                | 0.76                                                                                |
| v/c Ratio               | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.17                                                                              | 0.42                                                                              |                                                                                   | 0.02                                                                               | 0.50                                                                                |                                                                                     |                                                                                     | 0.30                                                                                | 0.27                                                                                |
| Control Delay           | 40.0                                                                              | 23.1                                                                              |                                                                                   | 41.5                                                                              | 25.6                                                                              |                                                                                   | 6.0                                                                                | 7.0                                                                                 |                                                                                     |                                                                                     | 19.3                                                                                | 11.0                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 40.0                                                                              | 23.1                                                                              |                                                                                   | 41.5                                                                              | 25.6                                                                              |                                                                                   | 6.0                                                                                | 7.0                                                                                 |                                                                                     |                                                                                     | 19.3                                                                                | 11.0                                                                                |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 30.6                                                                              |                                                                                   |                                                                                   | 29.1                                                                              |                                                                                   |                                                                                    | 7.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 11.8                                                                                |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 3.7                                                                               | 1.9                                                                               |                                                                                   | 5.6                                                                               | 9.3                                                                               |                                                                                   | 0.2                                                                                | 35.2                                                                                |                                                                                     |                                                                                     | 7.1                                                                                 | 34.4                                                                                |
| Queue Length 95th (m)   | 8.4                                                                               | 7.5                                                                               |                                                                                   | 11.3                                                                              | 19.8                                                                              |                                                                                   | 2.0                                                                                | 96.7                                                                                |                                                                                     |                                                                                     | 22.3                                                                                | 63.2                                                                                |
| Internal Link Dist (m)  |                                                                                   | 41.4                                                                              |                                                                                   |                                                                                   | 357.2                                                                             |                                                                                   |                                                                                    | 455.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 176.7                                                                               |
| Turn Bay Length (m)     | 15.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 120.0                                                                               |                                                                                     |
| Base Capacity (vph)     | 371                                                                               | 435                                                                               |                                                                                   | 391                                                                               | 492                                                                               |                                                                                   | 321                                                                                | 2642                                                                                |                                                                                     |                                                                                     | 258                                                                                 | 2606                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.05                                                                              | 0.06                                                                              |                                                                                   | 0.08                                                                              | 0.22                                                                              |                                                                                   | 0.02                                                                               | 0.50                                                                                |                                                                                     |                                                                                     | 0.30                                                                                | 0.27                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 40 (36%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 10.4

Intersection LOS: B

Intersection Capacity Utilization 73.4%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Terry Fox & Halkirk/Winchester





|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 28.3  |
| Total Split (s)         | 72.0  |
| Total Split (%)         | 65.5% |
| Maximum Green (s)       | 65.7  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.1   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.3   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 15.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 83.5  |
| Actuated g/C Ratio      | 0.76  |
| v/c Ratio               | 0.01  |
| Control Delay           | 6.1   |
| Queue Delay             | 0.0   |
| Total Delay             | 6.1   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.2   |
| Queue Length 95th (m)   | m1.0  |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 55.0  |
| Base Capacity (vph)     | 1168  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |



|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 312                                                                               | 1116                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1476                                                                                | 105                                                                                 | 21                                                                                  | 293                                                                                 | 135                                                                                 | 137                                                                                 |
| Future Volume (vph)        | 2                                                                                 | 312                                                                               | 1116                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1476                                                                                | 105                                                                                 | 21                                                                                  | 293                                                                                 | 135                                                                                 | 137                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                     |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 0.99                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3537                                                                                | 1582                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3426                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3391                                                                              | 3537                                                                                | 1555                                                                                | 1746                                                                                | 3502                                                                                | 1539                                                                                | 3409                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 128                                                                                 |                                                                                     |                                                                                     | 135                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                               |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                                |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 312                                                                               | 1116                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1476                                                                                | 105                                                                                 | 21                                                                                  | 293                                                                                 | 135                                                                                 | 137                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 314                                                                               | 1138                                                                              | 0                                                                                 | 0                                                                                 | 185                                                                               | 1476                                                                                | 105                                                                                 | 21                                                                                  | 293                                                                                 | 135                                                                                 | 137                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 97                                                                                | 14                                                                                | 97                                                                                |                                                                                     | 14                                                                                  | 97                                                                                  |                                                                                     | 97                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 473   | 404   |
| Future Volume (vph)        | 473   | 404   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 60.0  |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3502  | 1582  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3502  | 1555  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 173   |
| Link Speed (k/h)           | 50    |       |
| Link Distance (m)          | 251.2 |       |
| Travel Time (s)            | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 2%    | 1%    |
| Adj. Flow (vph)            | 473   | 404   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 473   | 404   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | R NA  |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 4     |       |
| Permitted Phases           |       | 4     |
| Detector Phase             | 4     | 4     |
| Switch Phase               |       |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 61.0                                                                              |                                                                                   | 15.0                                                                              | 15.0                                                                              | 60.0                                                                                | 60.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 12.3%                                                                             | 12.3%                                                                             | 46.9%                                                                             |                                                                                   | 11.5%                                                                             | 11.5%                                                                             | 46.2%                                                                               | 46.2%                                                                               | 9.2%                                                                                | 32.3%                                                                               | 32.3%                                                                               | 9.2%                                                                                |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 54.9                                                                              |                                                                                   | 8.9                                                                               | 8.9                                                                               | 53.9                                                                                | 53.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                 | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                               | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                                | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 17.3                                                                              | 64.2                                                                              |                                                                                   |                                                                                   | 10.7                                                                              | 57.6                                                                                | 57.6                                                                                | 5.8                                                                                 | 24.8                                                                                | 24.8                                                                                | 5.9                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.13                                                                              | 0.49                                                                              |                                                                                   |                                                                                   | 0.08                                                                              | 0.44                                                                                | 0.44                                                                                | 0.04                                                                                | 0.19                                                                                | 0.19                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.69                                                                              | 0.66                                                                              |                                                                                   |                                                                                   | 0.66                                                                              | 0.94                                                                                | 0.14                                                                                | 0.27                                                                                | 0.44                                                                                | 0.34                                                                                | 0.88                                                                                |
| Control Delay           |                                                                                   | 62.9                                                                              | 28.9                                                                              |                                                                                   |                                                                                   | 82.0                                                                              | 38.0                                                                                | 2.0                                                                                 | 68.8                                                                                | 46.9                                                                                | 8.1                                                                                 | 108.1                                                                               |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 62.9                                                                              | 28.9                                                                              |                                                                                   |                                                                                   | 82.0                                                                              | 38.0                                                                                | 2.0                                                                                 | 68.8                                                                                | 46.9                                                                                | 8.1                                                                                 | 108.1                                                                               |
| LOS                     |                                                                                   | E                                                                                 | C                                                                                 |                                                                                   |                                                                                   | F                                                                                 | D                                                                                   | A                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   | F                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 36.2                                                                              |                                                                                   |                                                                                   |                                                                                   | 40.5                                                                                |                                                                                     |                                                                                     | 36.3                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 36.7                                                                              | 112.0                                                                             |                                                                                   |                                                                                   | 18.8                                                                              | ~196.5                                                                              | 4.5                                                                                 | 4.9                                                                                 | 31.4                                                                                | 0.0                                                                                 | 16.9                                                                                |
| Queue Length 95th (m)   |                                                                                   | #73.1                                                                             | 144.0                                                                             |                                                                                   |                                                                                   | #38.8                                                                             | #233.7                                                                              | m2.7                                                                                | 13.1                                                                                | 40.3                                                                                | 13.9                                                                                | #34.3                                                                               |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                               |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 457                                                                               | 1724                                                                              |                                                                                   |                                                                                   | 280                                                                               | 1567                                                                                | 760                                                                                 | 79                                                                                  | 967                                                                                 | 522                                                                                 | 155                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.69                                                                              | 0.66                                                                              |                                                                                   |                                                                                   | 0.66                                                                              | 0.94                                                                                | 0.14                                                                                | 0.27                                                                                | 0.30                                                                                | 0.26                                                                                | 0.88                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 15 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 41.5

Intersection LOS: D

Intersection Capacity Utilization 104.3%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

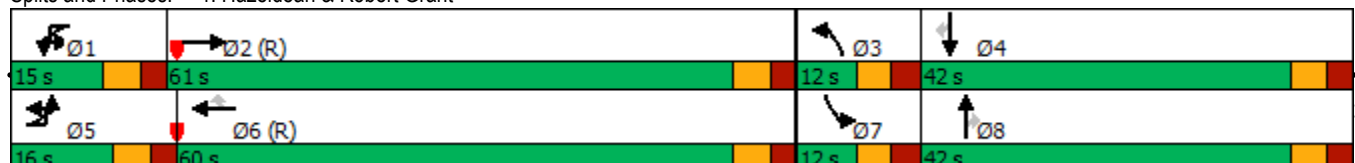
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Hazeldean & Robert Grant





| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 41.1  | 41.1  |
| Total Split (s)         | 42.0  | 42.0  |
| Total Split (%)         | 32.3% | 32.3% |
| Maximum Green (s)       | 35.9  | 35.9  |
| Yellow Time (s)         | 3.3   | 3.3   |
| All-Red Time (s)        | 2.8   | 2.8   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.1   | 6.1   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 28.0  | 28.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 29.6  | 29.6  |
| Actuated g/C Ratio      | 0.23  | 0.23  |
| v/c Ratio               | 0.59  | 0.83  |
| Control Delay           | 47.6  | 41.6  |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 47.6  | 41.6  |
| LOS                     | D     | D     |
| Approach Delay          | 53.4  |       |
| Approach LOS            | D     |       |
| Queue Length 50th (m)   | 53.7  | 55.6  |
| Queue Length 95th (m)   | 64.6  | 86.3  |
| Internal Link Dist (m)  | 227.2 |       |
| Turn Bay Length (m)     |       | 60.0  |
| Base Capacity (vph)     | 967   | 554   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.49  | 0.73  |
| Intersection Summary    |       |       |

2: Hazeldean & Roger Griffiths  
PM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |  |
| Traffic Volume (vph)       | 166                                                                               | 1211                                                                              | 104                                                                               | 52                                                                                | 1456                                                                              | 61                                                                                | 102                                                                                 | 0                                                                                   | 39                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Future Volume (vph)        | 166                                                                               | 1211                                                                              | 104                                                                               | 52                                                                                | 1456                                                                              | 61                                                                                | 102                                                                                 | 0                                                                                   | 39                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 75.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 180.0                                                                             | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 40.0                                                                                |                                                                                     | 40.0                                                                                |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   | 0.97                                                                              | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                |                                                                                     | 0.98                                                                                |
| Frt                        |                                                                                   | 0.988                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 3482                                                                              | 0                                                                                 | 1751                                                                              | 3502                                                                              | 1582                                                                              | 1751                                                                                | 1536                                                                                | 0                                                                                   | 1768                                                                                | 1843                                                                                | 1582                                                                                |
| Flt Permitted              | 0.115                                                                             |                                                                                   |                                                                                   | 0.209                                                                             |                                                                                   |                                                                                   | 0.757                                                                               |                                                                                     |                                                                                     | 0.732                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 214                                                                               | 3482                                                                              | 0                                                                                 | 384                                                                               | 3502                                                                              | 1530                                                                              | 1384                                                                                | 1536                                                                                | 0                                                                                   | 1352                                                                                | 1843                                                                                | 1551                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 16                                                                                |                                                                                   |                                                                                   |                                                                                   | 79                                                                                |                                                                                     | 108                                                                                 |                                                                                     |                                                                                     |                                                                                     | 202                                                                                 |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 297.5                                                                             |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                     | 259.5                                                                               |                                                                                     |                                                                                     | 237.4                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 17.9                                                                              |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                     | 18.7                                                                                |                                                                                     |                                                                                     | 17.1                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 166                                                                               | 1211                                                                              | 104                                                                               | 52                                                                                | 1456                                                                              | 61                                                                                | 102                                                                                 | 0                                                                                   | 39                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 166                                                                               | 1315                                                                              | 0                                                                                 | 52                                                                                | 1456                                                                              | 61                                                                                | 102                                                                                 | 39                                                                                  | 0                                                                                   | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 97                                                                                | 97                                                                                |                                                                                   | 14                                                                                | 97                                                                                  |                                                                                     | 97                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                | Right                                                                               |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                |                                                                                     | Perm                                                                                |
| Protected Phases           | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                 | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     | 4                                                                                   |
| Detector Phase             | 5                                                                                 | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 | 6                                                                                 | 8                                                                                   | 8                                                                                   |                                                                                     | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

2: Hazeldean & Roger Griffiths  
PM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 11.2                                                                              | 31.3                                                                              |                                                                                   | 31.3                                                                              | 31.3                                                                              | 31.3                                                                              | 31.2                                                                               | 31.2                                                                                |                                                                                     | 31.2                                                                                | 31.2                                                                                | 31.2                                                                                |
| Total Split (s)         | 20.0                                                                              | 97.0                                                                              |                                                                                   | 77.0                                                                              | 77.0                                                                              | 77.0                                                                              | 33.0                                                                               | 33.0                                                                                |                                                                                     | 33.0                                                                                | 33.0                                                                                | 33.0                                                                                |
| Total Split (%)         | 15.4%                                                                             | 74.6%                                                                             |                                                                                   | 59.2%                                                                             | 59.2%                                                                             | 59.2%                                                                             | 25.4%                                                                              | 25.4%                                                                               |                                                                                     | 25.4%                                                                               | 25.4%                                                                               | 25.4%                                                                               |
| Maximum Green (s)       | 13.8                                                                              | 90.7                                                                              |                                                                                   | 70.7                                                                              | 70.7                                                                              | 70.7                                                                              | 26.8                                                                               | 26.8                                                                                |                                                                                     | 26.8                                                                                | 26.8                                                                                | 26.8                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.3                                                                                | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.5                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                               | 2.6                                                                               | 2.6                                                                               | 2.9                                                                                | 2.9                                                                                 |                                                                                     | 2.9                                                                                 | 2.9                                                                                 | 2.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.2                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               | 6.3                                                                               | 6.2                                                                                | 6.2                                                                                 |                                                                                     | 6.2                                                                                 | 6.2                                                                                 | 6.2                                                                                 |
| Lead/Lag                | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               |                                                                                   |                                                                                   | Lag                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | C-Max                                                                             |                                                                                   | C-Max                                                                             | C-Max                                                                             | C-Max                                                                             | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   | 18.0                                                                              |                                                                                   | 18.0                                                                              | 18.0                                                                              | 18.0                                                                              | 18.0                                                                               | 18.0                                                                                |                                                                                     | 18.0                                                                                | 18.0                                                                                | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 101.7                                                                             | 101.6                                                                             |                                                                                   | 85.0                                                                              | 85.0                                                                              | 85.0                                                                              | 15.9                                                                               | 15.9                                                                                |                                                                                     | 15.9                                                                                |                                                                                     | 15.9                                                                                |
| Actuated g/C Ratio      | 0.78                                                                              | 0.78                                                                              |                                                                                   | 0.65                                                                              | 0.65                                                                              | 0.65                                                                              | 0.12                                                                               | 0.12                                                                                |                                                                                     | 0.12                                                                                |                                                                                     | 0.12                                                                                |
| v/c Ratio               | 0.57                                                                              | 0.48                                                                              |                                                                                   | 0.21                                                                              | 0.64                                                                              | 0.06                                                                              | 0.60                                                                               | 0.14                                                                                |                                                                                     | 0.57                                                                                |                                                                                     | 0.19                                                                                |
| Control Delay           | 24.0                                                                              | 10.4                                                                              |                                                                                   | 2.9                                                                               | 6.0                                                                               | 0.1                                                                               | 67.6                                                                               | 1.0                                                                                 |                                                                                     | 65.8                                                                                |                                                                                     | 1.2                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay             | 24.0                                                                              | 10.4                                                                              |                                                                                   | 2.9                                                                               | 6.0                                                                               | 0.1                                                                               | 67.6                                                                               | 1.0                                                                                 |                                                                                     | 65.8                                                                                |                                                                                     | 1.2                                                                                 |
| LOS                     | C                                                                                 | B                                                                                 |                                                                                   | A                                                                                 | A                                                                                 | A                                                                                 | E                                                                                  | A                                                                                   |                                                                                     | E                                                                                   |                                                                                     | A                                                                                   |
| Approach Delay          |                                                                                   | 11.9                                                                              |                                                                                   |                                                                                   | 5.7                                                                               |                                                                                   |                                                                                    | 49.2                                                                                |                                                                                     |                                                                                     | 38.2                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Queue Length 50th (m)   | 21.9                                                                              | 55.1                                                                              |                                                                                   | 0.5                                                                               | 7.7                                                                               | 0.0                                                                               | 23.4                                                                               | 0.0                                                                                 |                                                                                     | 21.5                                                                                |                                                                                     | 0.0                                                                                 |
| Queue Length 95th (m)   | m46.7                                                                             | 115.6                                                                             |                                                                                   | m0.8                                                                              | 9.0                                                                               | m0.0                                                                              | 37.4                                                                               | 0.0                                                                                 |                                                                                     | 34.9                                                                                |                                                                                     | 0.0                                                                                 |
| Internal Link Dist (m)  |                                                                                   | 273.5                                                                             |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                    | 235.5                                                                               |                                                                                     |                                                                                     | 213.4                                                                               |                                                                                     |
| Turn Bay Length (m)     | 75.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 180.0                                                                             |                                                                                    |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     | 40.0                                                                                |
| Base Capacity (vph)     | 336                                                                               | 2723                                                                              |                                                                                   | 251                                                                               | 2290                                                                              | 1028                                                                              | 285                                                                                | 402                                                                                 |                                                                                     | 278                                                                                 |                                                                                     | 480                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       | 0.49                                                                              | 0.48                                                                              |                                                                                   | 0.21                                                                              | 0.64                                                                              | 0.06                                                                              | 0.36                                                                               | 0.10                                                                                |                                                                                     | 0.34                                                                                |                                                                                     | 0.15                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 114 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 11.9

Intersection LOS: B

Intersection Capacity Utilization 81.7%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Hazeldean & Roger Griffiths



3: Mantra/Tillage & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 1                                                                                 | 82                                                                                | 1122                                                                              | 24                                                                                | 89                                                                                | 1420                                                                              | 212                                                                                | 20                                                                                  | 2                                                                                   | 43                                                                                  | 177                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 1                                                                                 | 82                                                                                | 1122                                                                              | 24                                                                                | 89                                                                                | 1420                                                                              | 212                                                                                | 20                                                                                  | 2                                                                                   | 43                                                                                  | 177                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 80.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 105.0                                                                              | 55.0                                                                                |                                                                                     | 0.0                                                                                 | 35.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   |                                                                                     | 0                                                                                   | 2                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 60.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                    | 35.0                                                                                |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.97                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.95                                                                               | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                | 0.98                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                              |                                                                                     | 0.857                                                                               |                                                                                     |                                                                                     | 0.851                                                                               |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1768                                                                              | 3523                                                                              | 0                                                                                 | 1701                                                                              | 3537                                                                              | 1582                                                                               | 1406                                                                                | 1565                                                                                | 0                                                                                   | 3431                                                                                | 1553                                                                                |
| Flt Permitted              |                                                                                   | 0.094                                                                             |                                                                                   |                                                                                   | 0.162                                                                             |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 175                                                                               | 3523                                                                              | 0                                                                                 | 290                                                                               | 3537                                                                              | 1510                                                                               | 1397                                                                                | 1565                                                                                | 0                                                                                   | 3389                                                                                | 1553                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   | 196                                                                                |                                                                                     | 43                                                                                  |                                                                                     |                                                                                     | 143                                                                                 |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                    |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |
| Link Distance (m)          |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                    |                                                                                     | 289.2                                                                               |                                                                                     |                                                                                     | 233.8                                                                               |
| Travel Time (s)            |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                    |                                                                                     | 20.8                                                                                |                                                                                     |                                                                                     | 16.8                                                                                |
| Confl. Peds. (#/hr)        |                                                                                   | 10                                                                                |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 10                                                                                 | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 5%                                                                                | 1%                                                                                | 1%                                                                                 | 27%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 1                                                                                 | 82                                                                                | 1122                                                                              | 24                                                                                | 89                                                                                | 1420                                                                              | 212                                                                                | 20                                                                                  | 2                                                                                   | 43                                                                                  | 177                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 83                                                                                | 1146                                                                              | 0                                                                                 | 89                                                                                | 1420                                                                              | 212                                                                                | 20                                                                                  | 45                                                                                  | 0                                                                                   | 177                                                                                 | 144                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | R NA                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                               | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                    |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                    |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                 | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                  | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                              | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                                | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                                | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                    |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                    |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                    |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | pm+pt                                                                             | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                | Perm                                                                               | Prot                                                                                | NA                                                                                  |                                                                                     | Prot                                                                                | NA                                                                                  |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                    | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |
| Permitted Phases           | 2                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 | 6                                                                                  | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |      |
|----------------------------|------|
| Lane Group                 | SBR  |
| Lane Configurations        |      |
| Traffic Volume (vph)       | 143  |
| Future Volume (vph)        | 143  |
| Ideal Flow (vphpl)         | 1800 |
| Storage Length (m)         | 0.0  |
| Storage Lanes              | 0    |
| Taper Length (m)           |      |
| Lane Util. Factor          | 1.00 |
| Ped Bike Factor            |      |
| Frt                        |      |
| Flt Protected              |      |
| Satd. Flow (prot)          | 0    |
| Flt Permitted              |      |
| Satd. Flow (perm)          | 0    |
| Right Turn on Red          | Yes  |
| Satd. Flow (RTOR)          |      |
| Link Speed (k/h)           |      |
| Link Distance (m)          |      |
| Travel Time (s)            |      |
| Confl. Peds. (#/hr)        | 5    |
| Peak Hour Factor           | 1.00 |
| Heavy Vehicles (%)         | 1%   |
| Adj. Flow (vph)            | 143  |
| Shared Lane Traffic (%)    |      |
| Lane Group Flow (vph)      | 0    |
| Enter Blocked Intersection | No   |
| Lane Alignment             | R NA |
| Median Width(m)            |      |
| Link Offset(m)             |      |
| Crosswalk Width(m)         |      |
| Two way Left Turn Lane     |      |
| Headway Factor             | 1.01 |
| Turning Speed (k/h)        | 14   |
| Number of Detectors        |      |
| Detector Template          |      |
| Leading Detector (m)       |      |
| Trailing Detector (m)      |      |
| Detector 1 Position(m)     |      |
| Detector 1 Size(m)         |      |
| Detector 1 Type            |      |
| Detector 1 Channel         |      |
| Detector 1 Extend (s)      |      |
| Detector 1 Queue (s)       |      |
| Detector 1 Delay (s)       |      |
| Detector 2 Position(m)     |      |
| Detector 2 Size(m)         |      |
| Detector 2 Type            |      |
| Detector 2 Channel         |      |
| Detector 2 Extend (s)      |      |
| Turn Type                  |      |
| Protected Phases           |      |
| Permitted Phases           |      |
| Detector Phase             |      |
| Switch Phase               |      |



3: Mantra/Tillage & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 10.0                                                                              | 10.0                                                                               | 5.0                                                                                 | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 10.0                                                                                |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 31.3                                                                              |                                                                                   | 11.1                                                                              | 31.3                                                                              | 31.3                                                                               | 11.5                                                                                | 31.5                                                                                |                                                                                     | 11.5                                                                                | 31.5                                                                                |
| Total Split (s)         | 17.0                                                                              | 17.0                                                                              | 53.0                                                                              |                                                                                   | 17.0                                                                              | 53.0                                                                              | 53.0                                                                               | 28.0                                                                                | 32.0                                                                                |                                                                                     | 28.0                                                                                | 32.0                                                                                |
| Total Split (%)         | 13.1%                                                                             | 13.1%                                                                             | 40.8%                                                                             |                                                                                   | 13.1%                                                                             | 40.8%                                                                             | 40.8%                                                                              | 21.5%                                                                               | 24.6%                                                                               |                                                                                     | 21.5%                                                                               | 24.6%                                                                               |
| Maximum Green (s)       | 10.9                                                                              | 10.9                                                                              | 46.7                                                                              |                                                                                   | 10.9                                                                              | 46.7                                                                              | 46.7                                                                               | 21.5                                                                                | 25.5                                                                                |                                                                                     | 21.5                                                                                | 25.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.3                                                                                 | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.6                                                                               |                                                                                   | 2.4                                                                               | 2.6                                                                               | 2.6                                                                                | 3.2                                                                                 | 3.2                                                                                 |                                                                                     | 3.2                                                                                 | 3.2                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.3                                                                               |                                                                                   | 6.1                                                                               | 6.3                                                                               | 6.3                                                                                | 6.5                                                                                 | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lag                                                                               | Lag                                                                                | Lag                                                                                 | Lead                                                                                |                                                                                     | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             | C-Max                                                                              | None                                                                                | None                                                                                |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                                |                                                                                     | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 18.0                                                                              | 18.0                                                                               |                                                                                     | 18.0                                                                                |                                                                                     |                                                                                     | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 10                                                                                | 10                                                                                 |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 82.0                                                                              | 74.0                                                                              |                                                                                   | 83.6                                                                              | 74.7                                                                              | 74.7                                                                               | 9.6                                                                                 | 13.0                                                                                |                                                                                     | 12.3                                                                                | 20.1                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.63                                                                              | 0.57                                                                              |                                                                                   | 0.64                                                                              | 0.57                                                                              | 0.57                                                                               | 0.07                                                                                | 0.10                                                                                |                                                                                     | 0.09                                                                                | 0.15                                                                                |
| v/c Ratio               |                                                                                   | 0.40                                                                              | 0.57                                                                              |                                                                                   | 0.32                                                                              | 0.70                                                                              | 0.22                                                                               | 0.19                                                                                | 0.23                                                                                |                                                                                     | 0.55                                                                                | 0.40                                                                                |
| Control Delay           |                                                                                   | 18.3                                                                              | 21.0                                                                              |                                                                                   | 12.6                                                                              | 24.7                                                                              | 4.1                                                                                | 58.5                                                                                | 17.6                                                                                |                                                                                     | 62.4                                                                                | 11.1                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 18.3                                                                              | 21.0                                                                              |                                                                                   | 12.6                                                                              | 24.7                                                                              | 4.1                                                                                | 58.5                                                                                | 17.6                                                                                |                                                                                     | 62.4                                                                                | 11.1                                                                                |
| LOS                     |                                                                                   | B                                                                                 | C                                                                                 |                                                                                   | B                                                                                 | C                                                                                 | A                                                                                  | E                                                                                   | B                                                                                   |                                                                                     | E                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 20.8                                                                              |                                                                                   |                                                                                   | 21.5                                                                              |                                                                                    |                                                                                     | 30.2                                                                                |                                                                                     |                                                                                     | 39.4                                                                                |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                    |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | D                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 6.0                                                                               | 87.4                                                                              |                                                                                   | 6.4                                                                               | 118.7                                                                             | 1.5                                                                                | 4.6                                                                                 | 0.5                                                                                 |                                                                                     | 20.9                                                                                | 0.2                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 19.8                                                                              | 147.9                                                                             |                                                                                   | 17.6                                                                              | #218.9                                                                            | 16.0                                                                               | 11.6                                                                                | 9.9                                                                                 |                                                                                     | 31.0                                                                                | 16.3                                                                                |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                    |                                                                                     | 265.2                                                                               |                                                                                     |                                                                                     | 209.8                                                                               |
| Turn Bay Length (m)     |                                                                                   | 80.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 105.0                                                                              | 55.0                                                                                |                                                                                     |                                                                                     | 35.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 248                                                                               | 2005                                                                              |                                                                                   | 314                                                                               | 2033                                                                              | 951                                                                                | 232                                                                                 | 341                                                                                 |                                                                                     | 567                                                                                 | 429                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.33                                                                              | 0.57                                                                              |                                                                                   | 0.28                                                                              | 0.70                                                                              | 0.22                                                                               | 0.09                                                                                | 0.13                                                                                |                                                                                     | 0.31                                                                                | 0.34                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 23.1

Intersection LOS: C

Intersection Capacity Utilization 80.1%

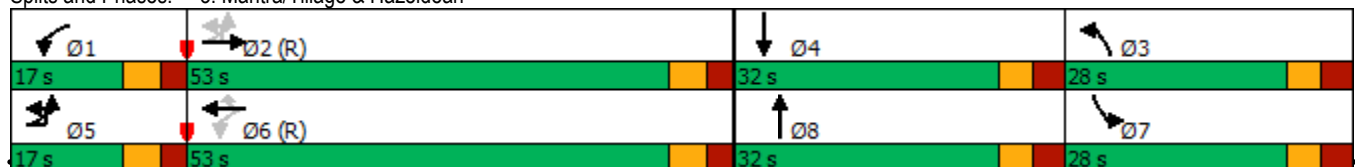
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Mantra/Tillage & Hazeldean





| Lane Group              | SBR |
|-------------------------|-----|
| Minimum Initial (s)     |     |
| Minimum Split (s)       |     |
| Total Split (s)         |     |
| Total Split (%)         |     |
| Maximum Green (s)       |     |
| Yellow Time (s)         |     |
| All-Red Time (s)        |     |
| Lost Time Adjust (s)    |     |
| Total Lost Time (s)     |     |
| Lead/Lag                |     |
| Lead-Lag Optimize?      |     |
| Vehicle Extension (s)   |     |
| Recall Mode             |     |
| Walk Time (s)           |     |
| Flash Dont Walk (s)     |     |
| Pedestrian Calls (#/hr) |     |
| Act Effct Green (s)     |     |
| Actuated g/C Ratio      |     |
| v/c Ratio               |     |
| Control Delay           |     |
| Queue Delay             |     |
| Total Delay             |     |
| LOS                     |     |
| Approach Delay          |     |
| Approach LOS            |     |
| Queue Length 50th (m)   |     |
| Queue Length 95th (m)   |     |
| Internal Link Dist (m)  |     |
| Turn Bay Length (m)     |     |
| Base Capacity (vph)     |     |
| Starvation Cap Reductn  |     |
| Spillback Cap Reductn   |     |
| Storage Cap Reductn     |     |
| Reduced v/c Ratio       |     |
| Intersection Summary    |     |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |   |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 439                                                                               | 804                                                                               | 270                                                                               | 14                                                                                | 312                                                                               | 1009                                                                                | 319                                                                                 | 307                                                                                 | 823                                                                                 | 215                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 2                                                                                 | 439                                                                               | 804                                                                               | 270                                                                               | 14                                                                                | 312                                                                               | 1009                                                                                | 319                                                                                 | 307                                                                                 | 823                                                                                 | 215                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                     | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.95                                                                              |                                                                                   | 0.99                                                                              |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 3364                                                                              | 3537                                                                              | 1551                                                                              | 0                                                                                 | 3398                                                                              | 3537                                                                                | 1551                                                                                | 3397                                                                                | 3468                                                                                | 1567                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 3359                                                                              | 3537                                                                              | 1481                                                                              | 0                                                                                 | 3365                                                                              | 3537                                                                                | 1521                                                                                | 3387                                                                                | 3468                                                                                | 1527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 232                                                                               |                                                                                   |                                                                                   |                                                                                     | 172                                                                                 |                                                                                     |                                                                                     | 150                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                  |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                               |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                 |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 24                                                                                |                                                                                   | 24                                                                                |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                  | 3%                                                                                  | 2%                                                                                  | 3%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 439                                                                               | 804                                                                               | 270                                                                               | 14                                                                                | 312                                                                               | 1009                                                                                | 319                                                                                 | 307                                                                                 | 823                                                                                 | 215                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 441                                                                               | 804                                                                               | 270                                                                               | 0                                                                                 | 326                                                                               | 1009                                                                                | 319                                                                                 | 307                                                                                 | 823                                                                                 | 215                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                                |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                   | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                            |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                 | SBL                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations        |  |  |  |
| Traffic Volume (vph)       | 327                                                                               | 948                                                                               | 429                                                                               |
| Future Volume (vph)        | 327                                                                               | 948                                                                               | 429                                                                               |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)         | 155.0                                                                             |                                                                                   | 200.0                                                                             |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              |
| Ped Bike Factor            | 0.99                                                                              |                                                                                   | 0.98                                                                              |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)          | 3431                                                                              | 3502                                                                              | 1567                                                                              |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)          | 3408                                                                              | 3502                                                                              | 1537                                                                              |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 262                                                                               |
| Link Speed (k/h)           |                                                                                   | 70                                                                                |                                                                                   |
| Link Distance (m)          |                                                                                   | 316.2                                                                             |                                                                                   |
| Travel Time (s)            |                                                                                   | 16.3                                                                              |                                                                                   |
| Confl. Peds. (#/hr)        | 10                                                                                |                                                                                   | 5                                                                                 |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 2%                                                                                |
| Adj. Flow (vph)            | 327                                                                               | 948                                                                               | 429                                                                               |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)      | 328                                                                               | 948                                                                               | 429                                                                               |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)            |                                                                                   | 10.0                                                                              |                                                                                   |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 | 1                                                                                 |
| Detector Template          | Left                                                                              | Thru                                                                              | Right                                                                             |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              |
| Protected Phases           | 1                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   | 6                                                                                 |
| Detector Phase             | 1                                                                                 | 6                                                                                 | 6                                                                                 |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                                | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 23.0                                                                              | 23.0                                                                              | 42.0                                                                              | 42.0                                                                              | 23.0                                                                              | 23.0                                                                              | 42.0                                                                                | 42.0                                                                                | 18.0                                                                                | 37.0                                                                                | 37.0                                                                                | 18.0                                                                                |
| Total Split (%)         | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                             | 35.0%                                                                             | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                               | 35.0%                                                                               | 15.0%                                                                               | 30.8%                                                                               | 30.8%                                                                               | 15.0%                                                                               |
| Maximum Green (s)       | 16.5                                                                              | 16.5                                                                              | 35.5                                                                              | 35.5                                                                              | 16.5                                                                              | 16.5                                                                              | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                | 11.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                 | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                                | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                                | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 24                                                                                | 24                                                                                |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 16.5                                                                              | 36.7                                                                              | 36.7                                                                              |                                                                                   | 15.3                                                                              | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.31                                                                              | 0.31                                                                              |                                                                                   | 0.13                                                                              | 0.30                                                                                | 0.30                                                                                | 0.10                                                                                | 0.25                                                                                | 0.25                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.95                                                                              | 0.74                                                                              | 0.44                                                                              |                                                                                   | 0.75                                                                              | 0.96                                                                                | 0.56                                                                                | 0.94                                                                                | 0.93                                                                                | 0.43                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 83.6                                                                              | 42.8                                                                              | 9.0                                                                               |                                                                                   | 50.9                                                                              | 69.3                                                                                | 31.0                                                                                | 97.7                                                                                | 54.9                                                                                | 9.2                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 83.6                                                                              | 42.8                                                                              | 9.0                                                                               |                                                                                   | 50.9                                                                              | 69.3                                                                                | 31.0                                                                                | 97.7                                                                                | 54.9                                                                                | 9.4                                                                                 |                                                                                     |
| LOS                     |                                                                                   | F                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | E                                                                                   | C                                                                                   | F                                                                                   | D                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 48.6                                                                              |                                                                                   |                                                                                   |                                                                                   | 58.3                                                                                |                                                                                     |                                                                                     | 57.4                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | E                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 49.6                                                                              | 83.6                                                                              | 6.0                                                                               |                                                                                   | 35.4                                                                              | 116.4                                                                               | 38.7                                                                                | 29.0                                                                                | 92.6                                                                                | 14.1                                                                                |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | #78.0                                                                             | 104.7                                                                             | 25.9                                                                              |                                                                                   | 49.3                                                                              | #157.8                                                                              | 74.2                                                                                | #61.4                                                                               | #127.0                                                                              | 7.6                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                               |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                     | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 462                                                                               | 1080                                                                              | 613                                                                               |                                                                                   | 467                                                                               | 1046                                                                                | 571                                                                                 | 325                                                                                 | 881                                                                                 | 499                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 35                                                                                  |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.95                                                                              | 0.74                                                                              | 0.44                                                                              |                                                                                   | 0.70                                                                              | 0.96                                                                                | 0.56                                                                                | 0.94                                                                                | 0.93                                                                                | 0.46                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 62.9

Intersection LOS: E

Intersection Capacity Utilization 102.2%

ICU Level of Service G

Analysis Period (min) 15

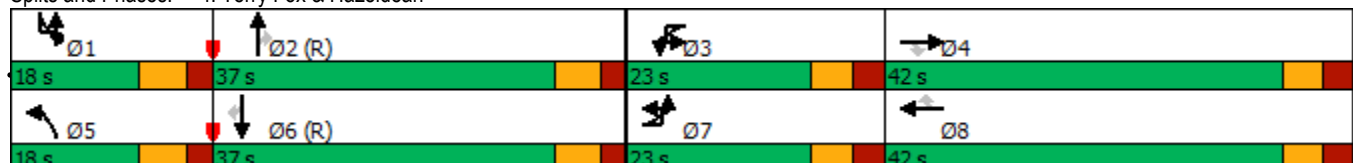
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

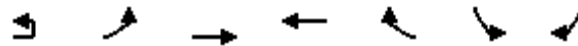
Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean

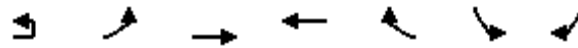




| Lane Group              | SBL   | SBT    | SBR   |
|-------------------------|-------|--------|-------|
| Switch Phase            |       |        |       |
| Minimum Initial (s)     | 5.0   | 10.0   | 10.0  |
| Minimum Split (s)       | 11.5  | 35.5   | 35.5  |
| Total Split (s)         | 18.0  | 37.0   | 37.0  |
| Total Split (%)         | 15.0% | 30.8%  | 30.8% |
| Maximum Green (s)       | 11.5  | 30.5   | 30.5  |
| Yellow Time (s)         | 4.2   | 4.2    | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3    | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0    | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5    | 6.5   |
| Lead/Lag                | Lead  | Lag    | Lag   |
| Lead-Lag Optimize?      |       |        |       |
| Vehicle Extension (s)   | 3.0   | 3.0    | 3.0   |
| Recall Mode             | None  | C-Max  | C-Max |
| Walk Time (s)           |       | 7.0    | 7.0   |
| Flash Dont Walk (s)     |       | 22.0   | 22.0  |
| Pedestrian Calls (#/hr) |       | 10     | 10    |
| Act Effct Green (s)     | 11.5  | 30.5   | 30.5  |
| Actuated g/C Ratio      | 0.10  | 0.25   | 0.25  |
| v/c Ratio               | 1.00  | 1.07   | 0.73  |
| Control Delay           | 106.9 | 91.0   | 26.1  |
| Queue Delay             | 34.1  | 0.0    | 0.0   |
| Total Delay             | 141.0 | 91.0   | 26.1  |
| LOS                     | F     | F      | C     |
| Approach Delay          |       | 84.3   |       |
| Approach LOS            |       | F      |       |
| Queue Length 50th (m)   | 39.2  | ~115.3 | 20.6  |
| Queue Length 95th (m)   | #66.5 | #153.3 | 78.9  |
| Internal Link Dist (m)  |       | 292.2  |       |
| Turn Bay Length (m)     | 155.0 |        | 200.0 |
| Base Capacity (vph)     | 328   | 890    | 586   |
| Starvation Cap Reductn  | 0     | 0      | 0     |
| Spillback Cap Reductn   | 60    | 0      | 0     |
| Storage Cap Reductn     | 0     | 0      | 0     |
| Reduced v/c Ratio       | 1.22  | 1.07   | 0.73  |
| Intersection Summary    |       |        |       |



| Lane Group                 | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 4     | 78    | 1293  | 1739  | 54    | 99    | 97    |
| Future Volume (vph)        | 4     | 78    | 1293  | 1739  | 54    | 99    | 97    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 35.0  |       |       | 0.0   | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       |       | 0     | 1     | 1     |
| Taper Length (m)           |       | 40.0  |       |       |       | 40.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  |
| Ped Bike Factor            |       |       |       | 1.00  |       | 0.99  | 0.97  |
| Frt                        |       |       |       | 0.995 |       |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1752  | 3537  | 3513  | 0     | 1768  | 1582  |
| Flt Permitted              |       | 0.090 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 166   | 3537  | 3513  | 0     | 1746  | 1533  |
| Right Turn on Red          |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 5     |       |       | 27    |
| Link Speed (k/h)           |       |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 157.6 | 314.8 |       | 401.6 |       |
| Travel Time (s)            |       |       | 9.5   | 18.9  |       | 28.9  |       |
| Confl. Peds. (#/hr)        |       | 17    |       |       | 17    | 10    | 15    |
| Peak Hour Factor           | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 1%    | 2%    | 1%    | 1%    | 1%    | 1%    | 1%    |
| Adj. Flow (vph)            | 4     | 78    | 1293  | 1739  | 54    | 99    | 97    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 82    | 1293  | 1793  | 0     | 99    | 97    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | L NA  | Left  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 8.0   | 4.0   |       | 4.0   |       |
| Link Offset(m)             |       |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 2     |       | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Thru  |       | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 10.0  |       | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 0.6   |       | 2.0   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex | CI+Ex | CI+Ex |       | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       |       | CI+Ex | CI+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | NA    |       | Perm  | Perm  |
| Protected Phases           |       |       | 2     | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       |       |       | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     |       | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |



| Lane Group              | EBU   | EBL   | EBT    | WBT   | WBR | SBL   | SBR   |
|-------------------------|-------|-------|--------|-------|-----|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  | 10.0   | 10.0  |     | 10.0  | 10.0  |
| Minimum Split (s)       | 16.2  | 16.2  | 16.2   | 31.2  |     | 34.1  | 34.1  |
| Total Split (s)         | 86.0  | 86.0  | 86.0   | 86.0  |     | 34.0  | 34.0  |
| Total Split (%)         | 71.7% | 71.7% | 71.7%  | 71.7% |     | 28.3% | 28.3% |
| Maximum Green (s)       | 79.8  | 79.8  | 79.8   | 79.8  |     | 27.9  | 27.9  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7    | 3.7   |     | 3.3   | 3.3   |
| All-Red Time (s)        | 2.5   | 2.5   | 2.5    | 2.5   |     | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0    | 0.0   |     | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.2   | 6.2    | 6.2   |     | 6.1   | 6.1   |
| Lead/Lag                |       |       |        |       |     |       |       |
| Lead-Lag Optimize?      |       |       |        |       |     |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0    | 3.0   |     | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max | C-Max  | C-Max |     | None  | None  |
| Walk Time (s)           |       |       |        | 7.0   |     | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |       |        | 18.0  |     | 21.0  | 21.0  |
| Pedestrian Calls (#/hr) |       |       |        | 17    |     | 15    | 15    |
| Act Effct Green (s)     |       | 90.1  | 90.1   | 90.1  |     | 17.6  | 17.6  |
| Actuated g/C Ratio      |       | 0.75  | 0.75   | 0.75  |     | 0.15  | 0.15  |
| v/c Ratio               |       | 0.66  | 0.49   | 0.68  |     | 0.39  | 0.39  |
| Control Delay           |       | 45.4  | 15.3   | 10.8  |     | 45.6  | 32.7  |
| Queue Delay             |       | 0.0   | 2.1    | 0.0   |     | 0.0   | 0.0   |
| Total Delay             |       | 45.4  | 17.5   | 10.8  |     | 45.6  | 32.7  |
| LOS                     |       | D     | B      | B     |     | D     | C     |
| Approach Delay          |       |       | 19.1   | 10.8  |     | 39.2  |       |
| Approach LOS            |       |       | B      | B     |     | D     |       |
| Queue Length 50th (m)   |       | 13.1  | 99.0   | 68.7  |     | 21.4  | 15.2  |
| Queue Length 95th (m)   |       | m23.8 | m160.1 | 154.3 |     | m28.4 | m21.8 |
| Internal Link Dist (m)  |       |       | 133.6  | 290.8 |     | 377.6 |       |
| Turn Bay Length (m)     |       | 35.0  |        |       |     | 30.0  |       |
| Base Capacity (vph)     |       | 124   | 2655   | 2638  |     | 405   | 377   |
| Starvation Cap Reductn  |       | 0     | 1168   | 0     |     | 0     | 0     |
| Spillback Cap Reductn   |       | 0     | 0      | 0     |     | 0     | 0     |
| Storage Cap Reductn     |       | 0     | 0      | 0     |     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.66  | 0.87   | 0.68  |     | 0.24  | 0.26  |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 10 (8%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 15.9

Intersection LOS: B

Intersection Capacity Utilization 90.6%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Hazeldean & Edgewater





|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                  | 1362                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1688                                                                                |
| Future Volume (vph)        | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                  | 1362                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1688                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.98                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                    | 0.993                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1669                                                                              | 1554                                                                              | 0                                                                                 | 1768                                                                              | 1560                                                                              | 0                                                                                 | 1768                                                                               | 3474                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3537                                                                                |
| Flt Permitted              | 0.393                                                                             |                                                                                   |                                                                                   | 0.752                                                                             |                                                                                   |                                                                                   | 0.108                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.111                                                                               |                                                                                     |
| Satd. Flow (perm)          | 688                                                                               | 1554                                                                              | 0                                                                                 | 1391                                                                              | 1560                                                                              | 0                                                                                 | 201                                                                                | 3474                                                                                | 0                                                                                   | 0                                                                                   | 203                                                                                 | 3537                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 127                                                                               |                                                                                   |                                                                                   | 121                                                                               |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                    | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                    | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 7%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 3%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                  | 1362                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1688                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 8                                                                                 | 0                                                                                 | 41                                                                                | 189                                                                               | 0                                                                                 | 2                                                                                  | 1425                                                                                | 0                                                                                   | 0                                                                                   | 165                                                                                 | 1688                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                    | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 29    |
| Future Volume (vph)        | 29    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1551  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1504  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 92    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 3%    |
| Adj. Flow (vph)            | 29    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 29    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 5.0                                                                                | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 5.0                                                                                 | 10.0                                                                                |
| Minimum Split (s)       | 36.5                                                                              | 36.5                                                                              |                                                                                   | 36.5                                                                              | 36.5                                                                              |                                                                                   | 11.6                                                                               | 34.5                                                                                |                                                                                     | 11.6                                                                                | 11.6                                                                                | 34.5                                                                                |
| Total Split (s)         | 37.0                                                                              | 37.0                                                                              |                                                                                   | 37.0                                                                              | 37.0                                                                              |                                                                                   | 14.0                                                                               | 69.0                                                                                |                                                                                     | 14.0                                                                                | 14.0                                                                                | 69.0                                                                                |
| Total Split (%)         | 30.8%                                                                             | 30.8%                                                                             |                                                                                   | 30.8%                                                                             | 30.8%                                                                             |                                                                                   | 11.7%                                                                              | 57.5%                                                                               |                                                                                     | 11.7%                                                                               | 11.7%                                                                               | 57.5%                                                                               |
| Maximum Green (s)       | 30.5                                                                              | 30.5                                                                              |                                                                                   | 30.5                                                                              | 30.5                                                                              |                                                                                   | 7.4                                                                                | 62.5                                                                                |                                                                                     | 7.4                                                                                 | 7.4                                                                                 | 62.5                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 3.2                                                                               | 3.2                                                                               |                                                                                   | 3.2                                                                               | 3.2                                                                               |                                                                                   | 2.4                                                                                | 2.3                                                                                 |                                                                                     | 2.4                                                                                 | 2.4                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.6                                                                                | 6.5                                                                                 |                                                                                     |                                                                                     | 6.6                                                                                 | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lead                                                                                | Lag                                                                                 |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               |                                                                                     | None                                                                                | None                                                                                | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                    | 7.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   |                                                                                    | 21.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 21.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                    | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     | 5                                                                                   |
| Act Effct Green (s)     | 15.1                                                                              | 15.1                                                                              |                                                                                   | 15.1                                                                              | 15.1                                                                              |                                                                                   | 79.7                                                                               | 74.3                                                                                |                                                                                     |                                                                                     | 91.0                                                                                | 89.5                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.66                                                                               | 0.62                                                                                |                                                                                     |                                                                                     | 0.76                                                                                | 0.75                                                                                |
| v/c Ratio               | 0.17                                                                              | 0.03                                                                              |                                                                                   | 0.24                                                                              | 0.63                                                                              |                                                                                   | 0.01                                                                               | 0.66                                                                                |                                                                                     |                                                                                     | 0.56                                                                                | 0.64                                                                                |
| Control Delay           | 47.2                                                                              | 0.1                                                                               |                                                                                   | 41.1                                                                              | 24.0                                                                              |                                                                                   | 5.0                                                                                | 9.1                                                                                 |                                                                                     |                                                                                     | 16.5                                                                                | 11.6                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 47.2                                                                              | 0.1                                                                               |                                                                                   | 41.1                                                                              | 24.0                                                                              |                                                                                   | 5.0                                                                                | 9.1                                                                                 |                                                                                     |                                                                                     | 16.5                                                                                | 11.6                                                                                |
| LOS                     | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 30.8                                                                              |                                                                                   |                                                                                   | 27.0                                                                              |                                                                                   |                                                                                    | 9.1                                                                                 |                                                                                     |                                                                                     |                                                                                     | 11.8                                                                                |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 3.1                                                                               | 0.0                                                                               |                                                                                   | 8.7                                                                               | 17.0                                                                              |                                                                                   | 0.0                                                                                | 45.0                                                                                |                                                                                     |                                                                                     | 6.4                                                                                 | 59.6                                                                                |
| Queue Length 95th (m)   | 7.9                                                                               | 0.0                                                                               |                                                                                   | m12.3                                                                             | m30.4                                                                             |                                                                                   | m0.2                                                                               | 31.5                                                                                |                                                                                     |                                                                                     | #38.5                                                                               | 196.0                                                                               |
| Internal Link Dist (m)  |                                                                                   | 193.1                                                                             |                                                                                   |                                                                                   | 258.1                                                                             |                                                                                   |                                                                                    | 229.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 336.0                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 65.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |                                                                                     |
| Base Capacity (vph)     | 174                                                                               | 489                                                                               |                                                                                   | 353                                                                               | 486                                                                               |                                                                                   | 233                                                                                | 2153                                                                                |                                                                                     |                                                                                     | 294                                                                                 | 2637                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.09                                                                              | 0.02                                                                              |                                                                                   | 0.12                                                                              | 0.39                                                                              |                                                                                   | 0.01                                                                               | 0.66                                                                                |                                                                                     |                                                                                     | 0.56                                                                                | 0.64                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 46 (38%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 11.8

Intersection LOS: B

Intersection Capacity Utilization 84.7%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 69.0  |
| Total Split (%)         | 57.5% |
| Maximum Green (s)       | 62.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                | Lag   |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 89.5  |
| Actuated g/C Ratio      | 0.75  |
| v/c Ratio               | 0.03  |
| Control Delay           | 0.0   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.0   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.0   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1144  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.03  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBU                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |  |                                                                                     |                                                                                     |  |
| Traffic Volume (vph)       | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1244                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Future Volume (vph)        | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1244                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 35.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 |                                                                                    | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (m)           | 25.0                                                                              |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                    | 10.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                               | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor            | 0.99                                                                              | 0.98                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                    |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                    |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 1768                                                                              | 1552                                                                              | 0                                                                                 | 1488                                                                              | 1552                                                                              | 0                                                                                 | 0                                                                                  | 1768                                                                                | 3457                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                |
| Flt Permitted              | 0.756                                                                             |                                                                                   |                                                                                   | 0.740                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.127                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.199                                                                               |
| Satd. Flow (perm)          | 1398                                                                              | 1552                                                                              | 0                                                                                 | 1152                                                                              | 1552                                                                              | 0                                                                                 | 0                                                                                  | 236                                                                                 | 3457                                                                                | 0                                                                                   | 0                                                                                   | 370                                                                                 |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 123                                                                               |                                                                                   |                                                                                   | 148                                                                               |                                                                                   |                                                                                    |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   | 207.5                                                                             |                                                                                   |                                                                                   | 88.7                                                                              |                                                                                   |                                                                                    |                                                                                     | 316.2                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   | 14.9                                                                              |                                                                                   |                                                                                   | 10.6                                                                              |                                                                                   |                                                                                    |                                                                                     | 16.3                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 20%                                                                               | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 3%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1244                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 26                                                                                | 0                                                                                 | 5                                                                                 | 3                                                                                 | 0                                                                                 | 0                                                                                  | 39                                                                                  | 1268                                                                                | 0                                                                                   | 0                                                                                   | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                               | Left                                                                                | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 12.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                 | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



| Lane Group                 | SBT   | SBR  |
|----------------------------|-------|------|
| Lane Configurations        | ↑↑    |      |
| Traffic Volume (vph)       | 1527  | 1    |
| Future Volume (vph)        | 1527  | 1    |
| Ideal Flow (vphpl)         | 1800  | 1800 |
| Storage Length (m)         |       | 0.0  |
| Storage Lanes              |       | 0    |
| Taper Length (m)           |       |      |
| Lane Util. Factor          | 0.95  | 0.95 |
| Ped Bike Factor            | 1.00  |      |
| Frt                        |       |      |
| Flt Protected              |       |      |
| Satd. Flow (prot)          | 3537  | 0    |
| Flt Permitted              |       |      |
| Satd. Flow (perm)          | 3537  | 0    |
| Right Turn on Red          |       | Yes  |
| Satd. Flow (RTOR)          |       |      |
| Link Speed (k/h)           | 70    |      |
| Link Distance (m)          | 253.3 |      |
| Travel Time (s)            | 13.0  |      |
| Confl. Peds. (#/hr)        |       | 5    |
| Peak Hour Factor           | 1.00  | 1.00 |
| Heavy Vehicles (%)         | 1%    | 1%   |
| Adj. Flow (vph)            | 1527  | 1    |
| Shared Lane Traffic (%)    |       |      |
| Lane Group Flow (vph)      | 1528  | 0    |
| Enter Blocked Intersection | No    | No   |
| Lane Alignment             | Left  | R NA |
| Median Width(m)            | 12.0  |      |
| Link Offset(m)             | 0.0   |      |
| Crosswalk Width(m)         | 5.0   |      |
| Two way Left Turn Lane     |       |      |
| Headway Factor             | 1.01  | 1.01 |
| Turning Speed (k/h)        |       | 14   |
| Number of Detectors        | 2     |      |
| Detector Template          | Thru  |      |
| Leading Detector (m)       | 10.0  |      |
| Trailing Detector (m)      | 0.0   |      |
| Detector 1 Position(m)     | 0.0   |      |
| Detector 1 Size(m)         | 0.6   |      |
| Detector 1 Type            | CI+Ex |      |
| Detector 1 Channel         |       |      |
| Detector 1 Extend (s)      | 0.0   |      |
| Detector 1 Queue (s)       | 0.0   |      |
| Detector 1 Delay (s)       | 0.0   |      |
| Detector 2 Position(m)     | 9.4   |      |
| Detector 2 Size(m)         | 0.6   |      |
| Detector 2 Type            | CI+Ex |      |
| Detector 2 Channel         |       |      |
| Detector 2 Extend (s)      | 0.0   |      |
| Turn Type                  | NA    |      |
| Protected Phases           | 6     |      |
| Permitted Phases           |       |      |
| Detector Phase             | 6     |      |
| Switch Phase               |       |      |

7: Terry Fox & Tony Graham Rec  
PM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBU                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 5.0                                                                                | 5.0                                                                                 | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.2                                                                              | 32.2                                                                              |                                                                                   | 11.5                                                                               | 11.5                                                                                | 32.5                                                                                |                                                                                     | 11.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                | 72.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                |
| Total Split (%)         | 27.5%                                                                             | 27.5%                                                                             |                                                                                   | 27.5%                                                                             | 27.5%                                                                             |                                                                                   | 12.5%                                                                              | 12.5%                                                                               | 60.0%                                                                               |                                                                                     | 12.5%                                                                               | 12.5%                                                                               |
| Maximum Green (s)       | 26.8                                                                              | 26.8                                                                              |                                                                                   | 26.8                                                                              | 26.8                                                                              |                                                                                   | 8.5                                                                                | 8.5                                                                                 | 65.5                                                                                |                                                                                     | 8.5                                                                                 | 8.5                                                                                 |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Total Lost Time (s)     | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.2                                                                               | 6.2                                                                               |                                                                                   |                                                                                    | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |                                                                                     | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lead                                                                                | Lag                                                                                 |                                                                                     | Lead                                                                                | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | None                                                                                | C-Max                                                                               |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 7.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Flash Dont Walk (s)     | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                              | 19.0                                                                              |                                                                                   |                                                                                    |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                    |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Act Effct Green (s)     | 13.2                                                                              | 13.2                                                                              |                                                                                   | 13.2                                                                              | 13.2                                                                              |                                                                                   |                                                                                    | 99.6                                                                                | 100.7                                                                               |                                                                                     |                                                                                     | 96.1                                                                                |
| Actuated g/C Ratio      | 0.11                                                                              | 0.11                                                                              |                                                                                   | 0.11                                                                              | 0.11                                                                              |                                                                                   |                                                                                    | 0.83                                                                                | 0.84                                                                                |                                                                                     |                                                                                     | 0.80                                                                                |
| v/c Ratio               | 0.02                                                                              | 0.09                                                                              |                                                                                   | 0.04                                                                              | 0.01                                                                              |                                                                                   |                                                                                    | 0.14                                                                                | 0.44                                                                                |                                                                                     |                                                                                     | 0.01                                                                                |
| Control Delay           | 43.0                                                                              | 0.7                                                                               |                                                                                   | 43.8                                                                              | 0.0                                                                               |                                                                                   |                                                                                    | 2.7                                                                                 | 2.5                                                                                 |                                                                                     |                                                                                     | 5.2                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Total Delay             | 43.0                                                                              | 0.7                                                                               |                                                                                   | 43.8                                                                              | 0.0                                                                               |                                                                                   |                                                                                    | 2.7                                                                                 | 2.5                                                                                 |                                                                                     |                                                                                     | 5.2                                                                                 |
| LOS                     | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | A                                                                                 |                                                                                   |                                                                                    | A                                                                                   | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |
| Approach Delay          |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 27.4                                                                              |                                                                                   |                                                                                    |                                                                                     | 2.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 50th (m)   | 0.6                                                                               | 0.0                                                                               |                                                                                   | 1.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 1.0                                                                                 | 17.8                                                                                |                                                                                     |                                                                                     | 0.1                                                                                 |
| Queue Length 95th (m)   | 2.9                                                                               | 0.0                                                                               |                                                                                   | 4.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | m1.7                                                                                | m26.4                                                                               |                                                                                     |                                                                                     | m0.4                                                                                |
| Internal Link Dist (m)  |                                                                                   | 183.5                                                                             |                                                                                   |                                                                                   | 64.7                                                                              |                                                                                   |                                                                                    |                                                                                     | 292.2                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Turn Bay Length (m)     | 35.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |
| Base Capacity (vph)     | 312                                                                               | 442                                                                               |                                                                                   | 257                                                                               | 461                                                                               |                                                                                   |                                                                                    | 304                                                                                 | 2902                                                                                |                                                                                     |                                                                                     | 400                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       | 0.01                                                                              | 0.06                                                                              |                                                                                   | 0.02                                                                              | 0.01                                                                              |                                                                                   |                                                                                    | 0.13                                                                                | 0.44                                                                                |                                                                                     |                                                                                     | 0.01                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 40 (33%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 4.3

Intersection LOS: A

Intersection Capacity Utilization 65.6%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Terry Fox & Tony Graham Rec





| Lane Group              | SBT   | SBR |
|-------------------------|-------|-----|
| Minimum Initial (s)     | 10.0  |     |
| Minimum Split (s)       | 32.5  |     |
| Total Split (s)         | 72.0  |     |
| Total Split (%)         | 60.0% |     |
| Maximum Green (s)       | 65.5  |     |
| Yellow Time (s)         | 4.2   |     |
| All-Red Time (s)        | 2.3   |     |
| Lost Time Adjust (s)    | 0.0   |     |
| Total Lost Time (s)     | 6.5   |     |
| Lead/Lag                | Lag   |     |
| Lead-Lag Optimize?      |       |     |
| Vehicle Extension (s)   | 3.0   |     |
| Recall Mode             | C-Max |     |
| Walk Time (s)           | 7.0   |     |
| Flash Dont Walk (s)     | 19.0  |     |
| Pedestrian Calls (#/hr) | 5     |     |
| Act Effct Green (s)     | 95.4  |     |
| Actuated g/C Ratio      | 0.80  |     |
| v/c Ratio               | 0.54  |     |
| Control Delay           | 5.8   |     |
| Queue Delay             | 0.0   |     |
| Total Delay             | 5.8   |     |
| LOS                     | A     |     |
| Approach Delay          | 5.8   |     |
| Approach LOS            | A     |     |
| Queue Length 50th (m)   | 29.0  |     |
| Queue Length 95th (m)   | 55.2  |     |
| Internal Link Dist (m)  | 229.3 |     |
| Turn Bay Length (m)     |       |     |
| Base Capacity (vph)     | 2810  |     |
| Starvation Cap Reductn  | 0     |     |
| Spillback Cap Reductn   | 0     |     |
| Storage Cap Reductn     | 0     |     |
| Reduced v/c Ratio       | 0.54  |     |
| Intersection Summary    |       |     |



8: Terry Fox & Sobey's  
PM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 1022                                                                                | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1401                                                                                |
| Future Volume (vph)        | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 1022                                                                                | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1401                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 10.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 30.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.91                                                                                | 0.91                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.917                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.990                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.992                                                                               |
| Flt Protected              |                                                                                   | 0.984                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1658                                                                              | 0                                                                                 | 0                                                                                 | 1776                                                                              | 1582                                                                              | 1768                                                                               | 5019                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3499                                                                                |
| Flt Permitted              |                                                                                   | 0.864                                                                             |                                                                                   |                                                                                   | 0.602                                                                             |                                                                                   | 0.138                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.238                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1453                                                                              | 0                                                                                 | 0                                                                                 | 1114                                                                              | 1552                                                                              | 257                                                                                | 5019                                                                                | 0                                                                                   | 0                                                                                   | 442                                                                                 | 3499                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 103                                                                               |                                                                                    | 20                                                                                  |                                                                                     |                                                                                     |                                                                                     | 10                                                                                  |
| Link Speed (k/h)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 132.0                                                                             |                                                                                   |                                                                                   | 152.6                                                                             |                                                                                   |                                                                                    | 140.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 142.7                                                                               |
| Travel Time (s)            |                                                                                   | 15.8                                                                              |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                    | 7.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.3                                                                                 |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 10                                                                                 |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 1022                                                                                | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1401                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 117                                                                               | 0                                                                                 | 0                                                                                 | 80                                                                                | 103                                                                               | 26                                                                                 | 1098                                                                                | 0                                                                                   | 0                                                                                   | 117                                                                                 | 1483                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |

|                            |      |    |
|----------------------------|------|----|
| Lane Group                 | SBR  | Ø9 |
| Lane Configurations        |      |    |
| Traffic Volume (vph)       | 82   |    |
| Future Volume (vph)        | 82   |    |
| Ideal Flow (vphpl)         | 1800 |    |
| Storage Length (m)         | 0.0  |    |
| Storage Lanes              | 0    |    |
| Taper Length (m)           |      |    |
| Lane Util. Factor          | 0.95 |    |
| Ped Bike Factor            |      |    |
| Frt                        |      |    |
| Flt Protected              |      |    |
| Satd. Flow (prot)          | 0    |    |
| Flt Permitted              |      |    |
| Satd. Flow (perm)          | 0    |    |
| Right Turn on Red          | Yes  |    |
| Satd. Flow (RTOR)          |      |    |
| Link Speed (k/h)           |      |    |
| Link Distance (m)          |      |    |
| Travel Time (s)            |      |    |
| Confl. Peds. (#/hr)        | 10   |    |
| Confl. Bikes (#/hr)        | 1    |    |
| Peak Hour Factor           | 1.00 |    |
| Heavy Vehicles (%)         | 1%   |    |
| Adj. Flow (vph)            | 82   |    |
| Shared Lane Traffic (%)    |      |    |
| Lane Group Flow (vph)      | 0    |    |
| Enter Blocked Intersection | No   |    |
| Lane Alignment             | R NA |    |
| Median Width(m)            |      |    |
| Link Offset(m)             |      |    |
| Crosswalk Width(m)         |      |    |
| Two way Left Turn Lane     |      |    |
| Headway Factor             | 1.01 |    |
| Turning Speed (k/h)        | 14   |    |
| Number of Detectors        |      |    |
| Detector Template          |      |    |
| Leading Detector (m)       |      |    |
| Trailing Detector (m)      |      |    |
| Detector 1 Position(m)     |      |    |
| Detector 1 Size(m)         |      |    |
| Detector 1 Type            |      |    |
| Detector 1 Channel         |      |    |
| Detector 1 Extend (s)      |      |    |
| Detector 1 Queue (s)       |      |    |
| Detector 1 Delay (s)       |      |    |
| Detector 2 Position(m)     |      |    |
| Detector 2 Size(m)         |      |    |
| Detector 2 Type            |      |    |
| Detector 2 Channel         |      |    |
| Detector 2 Extend (s)      |      |    |
| Turn Type                  |      |    |
| Protected Phases           | 9    |    |
| Permitted Phases           |      |    |
| Detector Phase             |      |    |

8: Terry Fox & Sobey's  
PM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 26.0                                                                               | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                | 26.0                                                                                |
| Total Split (s)         | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 84.0                                                                               | 84.0                                                                                |                                                                                     | 84.0                                                                                | 84.0                                                                                | 84.0                                                                                |
| Total Split (%)         | 25.8%                                                                             | 25.8%                                                                             |                                                                                   | 25.8%                                                                             | 25.8%                                                                             | 25.8%                                                                             | 70.0%                                                                              | 70.0%                                                                               |                                                                                     | 70.0%                                                                               | 70.0%                                                                               | 70.0%                                                                               |
| Maximum Green (s)       | 24.0                                                                              | 24.0                                                                              |                                                                                   | 24.0                                                                              | 24.0                                                                              | 24.0                                                                              | 78.0                                                                               | 78.0                                                                                |                                                                                     | 78.0                                                                                | 78.0                                                                                | 78.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 1.8                                                                                | 1.8                                                                                 |                                                                                     | 1.8                                                                                 | 1.8                                                                                 | 1.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               | 6.0                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 6.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 17.0                                                                              | 17.0                                                                              |                                                                                   | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              | 13.0                                                                               | 13.0                                                                                |                                                                                     | 13.0                                                                                | 13.0                                                                                | 13.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  | 10                                                                                  |
| Act Effct Green (s)     |                                                                                   | 14.8                                                                              |                                                                                   |                                                                                   | 14.8                                                                              | 14.8                                                                              | 87.2                                                                               | 87.2                                                                                |                                                                                     |                                                                                     | 87.2                                                                                | 87.2                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.12                                                                              | 0.12                                                                              | 0.73                                                                               | 0.73                                                                                |                                                                                     |                                                                                     | 0.73                                                                                | 0.73                                                                                |
| v/c Ratio               |                                                                                   | 0.50                                                                              |                                                                                   |                                                                                   | 0.58                                                                              | 0.37                                                                              | 0.14                                                                               | 0.30                                                                                |                                                                                     |                                                                                     | 0.37                                                                                | 0.58                                                                                |
| Control Delay           |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 65.2                                                                              | 11.8                                                                              | 6.8                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 | 3.5                                                                                 |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.3                                                                                 |
| Total Delay             |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 65.2                                                                              | 11.8                                                                              | 6.8                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 4.0                                                                                 | 3.8                                                                                 |
| LOS                     |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 | B                                                                                 | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 35.1                                                                              |                                                                                   |                                                                                    | 6.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 3.8                                                                                 |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   | 16.9                                                                              | 0.0                                                                               | 2.0                                                                                | 34.3                                                                                |                                                                                     |                                                                                     | 1.7                                                                                 | 11.1                                                                                |
| Queue Length 95th (m)   |                                                                                   | 26.0                                                                              |                                                                                   |                                                                                   | 29.2                                                                              | 13.2                                                                              | 5.9                                                                                | 39.3                                                                                |                                                                                     |                                                                                     | m3.7                                                                                | m20.5                                                                               |
| Internal Link Dist (m)  |                                                                                   | 108.0                                                                             |                                                                                   |                                                                                   | 128.6                                                                             |                                                                                   |                                                                                    | 116.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 118.7                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 338                                                                               |                                                                                   |                                                                                   | 222                                                                               | 392                                                                               | 186                                                                                | 3650                                                                                |                                                                                     |                                                                                     | 320                                                                                 | 2544                                                                                |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 423                                                                                 |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.35                                                                              |                                                                                   |                                                                                   | 0.36                                                                              | 0.26                                                                              | 0.14                                                                               | 0.30                                                                                |                                                                                     |                                                                                     | 0.37                                                                                | 0.70                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 22 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 7.6

Intersection LOS: A

Intersection Capacity Utilization 83.0%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Terry Fox & Sobey's



|                         |     |     |
|-------------------------|-----|-----|
| Lane Group              | SBR | Ø9  |
| Switch Phase            |     |     |
| Minimum Initial (s)     |     | 3.0 |
| Minimum Split (s)       |     | 5.0 |
| Total Split (s)         |     | 5.0 |
| Total Split (%)         |     | 4%  |
| Maximum Green (s)       |     | 3.0 |
| Yellow Time (s)         |     | 2.0 |
| All-Red Time (s)        |     | 0.0 |
| Lost Time Adjust (s)    |     |     |
| Total Lost Time (s)     |     |     |
| Lead/Lag                |     |     |
| Lead-Lag Optimize?      |     |     |
| Vehicle Extension (s)   |     | 3.0 |
| Recall Mode             |     | Max |
| Walk Time (s)           |     |     |
| Flash Dont Walk (s)     |     |     |
| Pedestrian Calls (#/hr) |     |     |
| Act Effct Green (s)     |     |     |
| Actuated g/C Ratio      |     |     |
| v/c Ratio               |     |     |
| Control Delay           |     |     |
| Queue Delay             |     |     |
| Total Delay             |     |     |
| LOS                     |     |     |
| Approach Delay          |     |     |
| Approach LOS            |     |     |
| Queue Length 50th (m)   |     |     |
| Queue Length 95th (m)   |     |     |
| Internal Link Dist (m)  |     |     |
| Turn Bay Length (m)     |     |     |
| Base Capacity (vph)     |     |     |
| Starvation Cap Reductn  |     |     |
| Spillback Cap Reductn   |     |     |
| Storage Cap Reductn     |     |     |
| Reduced v/c Ratio       |     |     |
| Intersection Summary    |     |     |

9: Terry Fox & Halkirk/Winchester  
PM Peak Hour

560 Hazeldean Road  
2031 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                 | 1015                                                                                | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1362                                                                                |
| Future Volume (vph)        | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                 | 1015                                                                                | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1362                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 15.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 65.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 120.0                                                                               |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 20.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 0.99                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     | 0.99                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.925                                                                             |                                                                                   |                                                                                   | 0.872                                                                             |                                                                                   |                                                                                    | 0.995                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1701                                                                              | 1701                                                                              | 0                                                                                 | 1768                                                                              | 1598                                                                              | 0                                                                                 | 1768                                                                               | 3512                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3537                                                                                |
| Flt Permitted              | 0.629                                                                             |                                                                                   |                                                                                   | 0.748                                                                             |                                                                                   |                                                                                   | 0.175                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.257                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1120                                                                              | 1701                                                                              | 0                                                                                 | 1376                                                                              | 1598                                                                              | 0                                                                                 | 326                                                                                | 3512                                                                                | 0                                                                                   | 0                                                                                   | 475                                                                                 | 3537                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 7                                                                                 |                                                                                   |                                                                                   | 97                                                                                |                                                                                   |                                                                                    | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 40                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 65.4                                                                              |                                                                                   |                                                                                   | 381.2                                                                             |                                                                                   |                                                                                    | 479.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 200.7                                                                               |
| Travel Time (s)            |                                                                                   | 4.7                                                                               |                                                                                   |                                                                                   | 34.3                                                                              |                                                                                   |                                                                                    | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     | 10.3                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                 | 10                                                                                 |                                                                                     | 14                                                                                  |                                                                                     | 14                                                                                  |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 5%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                 | 1015                                                                                | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1362                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 23                                                                                | 14                                                                                | 0                                                                                 | 48                                                                                | 114                                                                               | 0                                                                                 | 12                                                                                 | 1049                                                                                | 0                                                                                   | 0                                                                                   | 141                                                                                 | 1362                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 44    |
| Future Volume (vph)        | 44    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 55.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.95  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1508  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 44    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 10    |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 44    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 44    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 28.3                                                                               | 28.3                                                                                |                                                                                     | 28.3                                                                                | 28.3                                                                                | 28.3                                                                                |
| Total Split (s)         | 38.0                                                                              | 38.0                                                                              |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 82.0                                                                               | 82.0                                                                                |                                                                                     | 82.0                                                                                | 82.0                                                                                | 82.0                                                                                |
| Total Split (%)         | 31.7%                                                                             | 31.7%                                                                             |                                                                                   | 31.7%                                                                             | 31.7%                                                                             |                                                                                   | 68.3%                                                                              | 68.3%                                                                               |                                                                                     | 68.3%                                                                               | 68.3%                                                                               | 68.3%                                                                               |
| Maximum Green (s)       | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 75.7                                                                               | 75.7                                                                                |                                                                                     | 75.7                                                                                | 75.7                                                                                | 75.7                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.1                                                                                | 2.1                                                                                 |                                                                                     | 2.1                                                                                 | 2.1                                                                                 | 2.1                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.3                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 15.0                                                                                |
| Pedestrian Calls (#/hr) | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 14                                                                                 | 14                                                                                  |                                                                                     | 10                                                                                  | 10                                                                                  | 10                                                                                  |
| Act Effct Green (s)     | 14.3                                                                              | 14.3                                                                              |                                                                                   | 14.3                                                                              | 14.3                                                                              |                                                                                   | 93.4                                                                               | 93.4                                                                                |                                                                                     |                                                                                     | 93.4                                                                                | 93.4                                                                                |
| Actuated g/C Ratio      | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.78                                                                               | 0.78                                                                                |                                                                                     |                                                                                     | 0.78                                                                                | 0.78                                                                                |
| v/c Ratio               | 0.17                                                                              | 0.07                                                                              |                                                                                   | 0.29                                                                              | 0.41                                                                              |                                                                                   | 0.05                                                                               | 0.38                                                                                |                                                                                     |                                                                                     | 0.38                                                                                | 0.49                                                                                |
| Control Delay           | 46.9                                                                              | 29.7                                                                              |                                                                                   | 50.1                                                                              | 16.1                                                                              |                                                                                   | 5.8                                                                                | 5.5                                                                                 |                                                                                     |                                                                                     | 15.8                                                                                | 13.6                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 46.9                                                                              | 29.7                                                                              |                                                                                   | 50.1                                                                              | 16.1                                                                              |                                                                                   | 5.8                                                                                | 5.5                                                                                 |                                                                                     |                                                                                     | 15.8                                                                                | 13.6                                                                                |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | B                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 40.4                                                                              |                                                                                   |                                                                                   | 26.2                                                                              |                                                                                   |                                                                                    | 5.5                                                                                 |                                                                                     |                                                                                     |                                                                                     | 13.6                                                                                |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 4.8                                                                               | 1.4                                                                               |                                                                                   | 10.1                                                                              | 3.5                                                                               |                                                                                   | 0.4                                                                                | 24.8                                                                                |                                                                                     |                                                                                     | 17.6                                                                                | 92.4                                                                                |
| Queue Length 95th (m)   | 10.2                                                                              | 6.0                                                                               |                                                                                   | 17.4                                                                              | 16.0                                                                              |                                                                                   | 3.1                                                                                | 68.0                                                                                |                                                                                     |                                                                                     | 34.1                                                                                | 121.8                                                                               |
| Internal Link Dist (m)  |                                                                                   | 41.4                                                                              |                                                                                   |                                                                                   | 357.2                                                                             |                                                                                   |                                                                                    | 455.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 176.7                                                                               |
| Turn Bay Length (m)     | 15.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 120.0                                                                               |                                                                                     |
| Base Capacity (vph)     | 298                                                                               | 458                                                                               |                                                                                   | 366                                                                               | 497                                                                               |                                                                                   | 253                                                                                | 2735                                                                                |                                                                                     |                                                                                     | 369                                                                                 | 2754                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.08                                                                              | 0.03                                                                              |                                                                                   | 0.13                                                                              | 0.23                                                                              |                                                                                   | 0.05                                                                               | 0.38                                                                                |                                                                                     |                                                                                     | 0.38                                                                                | 0.49                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 115 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 11.6

Intersection LOS: B

Intersection Capacity Utilization 76.6%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Terry Fox & Halkirk/Winchester





|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 28.3  |
| Total Split (s)         | 82.0  |
| Total Split (%)         | 68.3% |
| Maximum Green (s)       | 75.7  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.1   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.3   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 15.0  |
| Pedestrian Calls (#/hr) | 10    |
| Act Effct Green (s)     | 93.4  |
| Actuated g/C Ratio      | 0.78  |
| v/c Ratio               | 0.04  |
| Control Delay           | 5.7   |
| Queue Delay             | 0.0   |
| Total Delay             | 5.7   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 1.3   |
| Queue Length 95th (m)   | m6.3  |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 55.0  |
| Base Capacity (vph)     | 1183  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.04  |
| Intersection Summary    |       |



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |   |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 312                                                                               | 1116                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1416                                                                                | 105                                                                                 | 21                                                                                  | 293                                                                                 | 135                                                                                 | 137                                                                                 |
| Future Volume (vph)        | 2                                                                                 | 312                                                                               | 1116                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1416                                                                                | 105                                                                                 | 21                                                                                  | 293                                                                                 | 135                                                                                 | 137                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                     |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 0.99                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3537                                                                                | 1582                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3426                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3391                                                                              | 3537                                                                                | 1555                                                                                | 1746                                                                                | 3502                                                                                | 1539                                                                                | 3409                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 128                                                                                 |                                                                                     |                                                                                     | 135                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                               |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                                |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 312                                                                               | 1116                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1416                                                                                | 105                                                                                 | 21                                                                                  | 293                                                                                 | 135                                                                                 | 137                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 314                                                                               | 1138                                                                              | 0                                                                                 | 0                                                                                 | 185                                                                               | 1416                                                                                | 105                                                                                 | 21                                                                                  | 293                                                                                 | 135                                                                                 | 137                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 97                                                                                | 14                                                                                | 97                                                                                |                                                                                     | 14                                                                                  | 97                                                                                  |                                                                                     | 97                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 473   | 404   |
| Future Volume (vph)        | 473   | 404   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 60.0  |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3502  | 1582  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3502  | 1555  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 175   |
| Link Speed (k/h)           | 50    |       |
| Link Distance (m)          | 251.2 |       |
| Travel Time (s)            | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 2%    | 1%    |
| Adj. Flow (vph)            | 473   | 404   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 473   | 404   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | R NA  |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 4     |       |
| Permitted Phases           |       | 4     |
| Detector Phase             | 4     | 4     |
| Switch Phase               |       |       |

1: Hazeldean & Robert Grant  
PM Peak Hour

560 Hazeldean Road  
2031 Background Traffic (demand rationalized)

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 61.0                                                                              |                                                                                   | 15.0                                                                              | 15.0                                                                              | 60.0                                                                                | 60.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 12.3%                                                                             | 12.3%                                                                             | 46.9%                                                                             |                                                                                   | 11.5%                                                                             | 11.5%                                                                             | 46.2%                                                                               | 46.2%                                                                               | 9.2%                                                                                | 32.3%                                                                               | 32.3%                                                                               | 9.2%                                                                                |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 54.9                                                                              |                                                                                   | 8.9                                                                               | 8.9                                                                               | 53.9                                                                                | 53.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                 | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                               | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                                | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 17.4                                                                              | 64.2                                                                              |                                                                                   |                                                                                   | 10.8                                                                              | 57.6                                                                                | 57.6                                                                                | 5.8                                                                                 | 24.7                                                                                | 24.7                                                                                | 5.9                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.13                                                                              | 0.49                                                                              |                                                                                   |                                                                                   | 0.08                                                                              | 0.44                                                                                | 0.44                                                                                | 0.04                                                                                | 0.19                                                                                | 0.19                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.69                                                                              | 0.66                                                                              |                                                                                   |                                                                                   | 0.66                                                                              | 0.90                                                                                | 0.14                                                                                | 0.27                                                                                | 0.44                                                                                | 0.34                                                                                | 0.88                                                                                |
| Control Delay           |                                                                                   | 62.7                                                                              | 28.9                                                                              |                                                                                   |                                                                                   | 82.2                                                                              | 33.1                                                                                | 2.1                                                                                 | 68.8                                                                                | 46.9                                                                                | 8.2                                                                                 | 108.1                                                                               |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 62.7                                                                              | 28.9                                                                              |                                                                                   |                                                                                   | 82.2                                                                              | 33.1                                                                                | 2.1                                                                                 | 68.8                                                                                | 46.9                                                                                | 8.2                                                                                 | 108.1                                                                               |
| LOS                     |                                                                                   | E                                                                                 | C                                                                                 |                                                                                   |                                                                                   | F                                                                                 | C                                                                                   | A                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   | F                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 36.2                                                                              |                                                                                   |                                                                                   |                                                                                   | 36.5                                                                                |                                                                                     |                                                                                     | 36.3                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 36.7                                                                              | 111.7                                                                             |                                                                                   |                                                                                   | 18.8                                                                              | 186.5                                                                               | 4.7                                                                                 | 4.9                                                                                 | 31.5                                                                                | 0.0                                                                                 | 16.9                                                                                |
| Queue Length 95th (m)   |                                                                                   | #73.1                                                                             | 144.0                                                                             |                                                                                   |                                                                                   | #38.5                                                                             | #218.5                                                                              | m2.8                                                                                | 13.1                                                                                | 40.3                                                                                | 13.9                                                                                | #34.3                                                                               |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                               |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 458                                                                               | 1725                                                                              |                                                                                   |                                                                                   | 281                                                                               | 1567                                                                                | 760                                                                                 | 79                                                                                  | 967                                                                                 | 522                                                                                 | 155                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.69                                                                              | 0.66                                                                              |                                                                                   |                                                                                   | 0.66                                                                              | 0.90                                                                                | 0.14                                                                                | 0.27                                                                                | 0.30                                                                                | 0.26                                                                                | 0.88                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 15 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 40.1

Intersection LOS: D

Intersection Capacity Utilization 102.6%

ICU Level of Service G

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Hazeldean & Robert Grant





| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 41.1  | 41.1  |
| Total Split (s)         | 42.0  | 42.0  |
| Total Split (%)         | 32.3% | 32.3% |
| Maximum Green (s)       | 35.9  | 35.9  |
| Yellow Time (s)         | 3.3   | 3.3   |
| All-Red Time (s)        | 2.8   | 2.8   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.1   | 6.1   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 28.0  | 28.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 29.5  | 29.5  |
| Actuated g/C Ratio      | 0.23  | 0.23  |
| v/c Ratio               | 0.59  | 0.83  |
| Control Delay           | 47.7  | 41.2  |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 47.7  | 41.2  |
| LOS                     | D     | D     |
| Approach Delay          | 53.3  |       |
| Approach LOS            | D     |       |
| Queue Length 50th (m)   | 53.8  | 55.2  |
| Queue Length 95th (m)   | 64.6  | 85.7  |
| Internal Link Dist (m)  | 227.2 |       |
| Turn Bay Length (m)     |       | 60.0  |
| Base Capacity (vph)     | 967   | 556   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.49  | 0.73  |
| Intersection Summary    |       |       |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2031 Background Traffic (demand rationalized)

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 409                                                                               | 804                                                                               | 270                                                                               | 14                                                                                | 312                                                                               | 919                                                                                | 319                                                                                 | 297                                                                                 | 813                                                                                 | 215                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 2                                                                                 | 409                                                                               | 804                                                                               | 270                                                                               | 14                                                                                | 312                                                                               | 919                                                                                | 319                                                                                 | 297                                                                                 | 813                                                                                 | 215                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.95                                                                              |                                                                                   | 0.99                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 3364                                                                              | 3537                                                                              | 1551                                                                              | 0                                                                                 | 3398                                                                              | 3537                                                                               | 1551                                                                                | 3397                                                                                | 3468                                                                                | 1567                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 3358                                                                              | 3537                                                                              | 1481                                                                              | 0                                                                                 | 3365                                                                              | 3537                                                                               | 1521                                                                                | 3386                                                                                | 3468                                                                                | 1527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 236                                                                               |                                                                                   |                                                                                   |                                                                                    | 174                                                                                 |                                                                                     |                                                                                     | 150                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 24                                                                                |                                                                                   | 24                                                                                |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 3%                                                                                  | 2%                                                                                  | 3%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 409                                                                               | 804                                                                               | 270                                                                               | 14                                                                                | 312                                                                               | 919                                                                                | 319                                                                                 | 297                                                                                 | 813                                                                                 | 215                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 411                                                                               | 804                                                                               | 270                                                                               | 0                                                                                 | 326                                                                               | 919                                                                                | 319                                                                                 | 297                                                                                 | 813                                                                                 | 215                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2031 Background Traffic (demand rationalized)

|                            |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                 | SBL                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations        |  |  |  |
| Traffic Volume (vph)       | 307                                                                               | 818                                                                               | 429                                                                               |
| Future Volume (vph)        | 307                                                                               | 818                                                                               | 429                                                                               |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)         | 155.0                                                                             |                                                                                   | 200.0                                                                             |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              |
| Ped Bike Factor            | 0.99                                                                              |                                                                                   | 0.98                                                                              |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)          | 3431                                                                              | 3502                                                                              | 1567                                                                              |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)          | 3408                                                                              | 3502                                                                              | 1537                                                                              |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 265                                                                               |
| Link Speed (k/h)           |                                                                                   | 70                                                                                |                                                                                   |
| Link Distance (m)          |                                                                                   | 316.2                                                                             |                                                                                   |
| Travel Time (s)            |                                                                                   | 16.3                                                                              |                                                                                   |
| Confl. Peds. (#/hr)        | 10                                                                                |                                                                                   | 5                                                                                 |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 2%                                                                                |
| Adj. Flow (vph)            | 307                                                                               | 818                                                                               | 429                                                                               |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)      | 308                                                                               | 818                                                                               | 429                                                                               |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)            |                                                                                   | 10.0                                                                              |                                                                                   |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 | 1                                                                                 |
| Detector Template          | Left                                                                              | Thru                                                                              | Right                                                                             |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              |
| Protected Phases           | 1                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   | 6                                                                                 |
| Detector Phase             | 1                                                                                 | 6                                                                                 | 6                                                                                 |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2031 Background Traffic (demand rationalized)

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                               | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                               | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 23.0                                                                              | 23.0                                                                              | 42.0                                                                              | 42.0                                                                              | 23.0                                                                              | 23.0                                                                              | 42.0                                                                               | 42.0                                                                                | 18.0                                                                                | 37.0                                                                                | 37.0                                                                                | 18.0                                                                                |
| Total Split (%)         | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                             | 35.0%                                                                             | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                              | 35.0%                                                                               | 15.0%                                                                               | 30.8%                                                                               | 30.8%                                                                               | 15.0%                                                                               |
| Maximum Green (s)       | 16.5                                                                              | 16.5                                                                              | 35.5                                                                              | 35.5                                                                              | 16.5                                                                              | 16.5                                                                              | 35.5                                                                               | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                | 11.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 24                                                                                | 24                                                                                |                                                                                   |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 16.4                                                                              | 35.6                                                                              | 35.6                                                                              |                                                                                   | 15.3                                                                              | 34.5                                                                               | 34.5                                                                                | 11.8                                                                                | 31.1                                                                                | 31.1                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.30                                                                              | 0.30                                                                              |                                                                                   | 0.13                                                                              | 0.29                                                                               | 0.29                                                                                | 0.10                                                                                | 0.26                                                                                | 0.26                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.90                                                                              | 0.77                                                                              | 0.45                                                                              |                                                                                   | 0.75                                                                              | 0.90                                                                               | 0.57                                                                                | 0.89                                                                                | 0.90                                                                                | 0.42                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 73.9                                                                              | 44.2                                                                              | 8.8                                                                               |                                                                                   | 50.9                                                                              | 63.1                                                                               | 31.6                                                                                | 88.3                                                                                | 50.4                                                                                | 9.1                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 73.9                                                                              | 44.2                                                                              | 8.8                                                                               |                                                                                   | 50.9                                                                              | 63.1                                                                               | 31.6                                                                                | 88.3                                                                                | 50.4                                                                                | 9.2                                                                                 |                                                                                     |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | E                                                                                  | C                                                                                   | F                                                                                   | D                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 46.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 54.2                                                                               |                                                                                     |                                                                                     | 52.2                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 45.7                                                                              | 83.6                                                                              | 5.3                                                                               |                                                                                   | 35.4                                                                              | 106.0                                                                              | 38.3                                                                                | 28.0                                                                                | 91.2                                                                                | 14.3                                                                                |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | #70.6                                                                             | 104.7                                                                             | 25.0                                                                              |                                                                                   | 49.3                                                                              | #134.6                                                                             | 73.9                                                                                | #58.5                                                                               | #124.7                                                                              | 7.6                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                              |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 462                                                                               | 1054                                                                              | 607                                                                               |                                                                                   | 467                                                                               | 1046                                                                               | 572                                                                                 | 335                                                                                 | 899                                                                                 | 506                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 35                                                                                  |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.89                                                                              | 0.76                                                                              | 0.44                                                                              |                                                                                   | 0.70                                                                              | 0.88                                                                               | 0.56                                                                                | 0.89                                                                                | 0.90                                                                                | 0.46                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 54.0

Intersection LOS: D

Intersection Capacity Utilization 98.4%

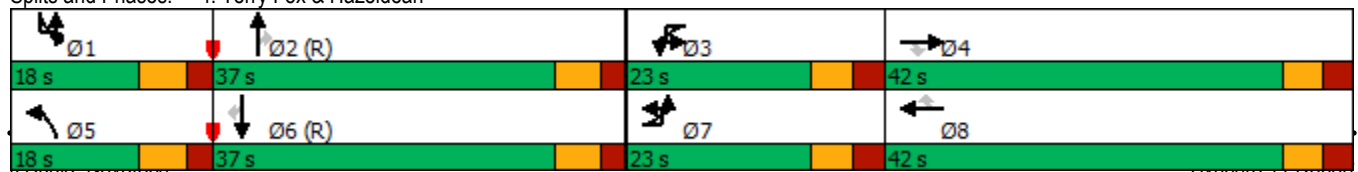
ICU Level of Service F

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean





| Lane Group              | SBL   | SBT    | SBR   |
|-------------------------|-------|--------|-------|
| Switch Phase            |       |        |       |
| Minimum Initial (s)     | 5.0   | 10.0   | 10.0  |
| Minimum Split (s)       | 11.5  | 35.5   | 35.5  |
| Total Split (s)         | 18.0  | 37.0   | 37.0  |
| Total Split (%)         | 15.0% | 30.8%  | 30.8% |
| Maximum Green (s)       | 11.5  | 30.5   | 30.5  |
| Yellow Time (s)         | 4.2   | 4.2    | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3    | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0    | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5    | 6.5   |
| Lead/Lag                | Lead  | Lag    | Lag   |
| Lead-Lag Optimize?      |       |        |       |
| Vehicle Extension (s)   | 3.0   | 3.0    | 3.0   |
| Recall Mode             | None  | C-Max  | C-Max |
| Walk Time (s)           |       | 7.0    | 7.0   |
| Flash Dont Walk (s)     |       | 22.0   | 22.0  |
| Pedestrian Calls (#/hr) |       | 10     | 10    |
| Act Effct Green (s)     | 12.0  | 31.3   | 31.3  |
| Actuated g/C Ratio      | 0.10  | 0.26   | 0.26  |
| v/c Ratio               | 0.90  | 0.90   | 0.72  |
| Control Delay           | 85.8  | 56.4   | 25.5  |
| Queue Delay             | 46.4  | 0.0    | 0.0   |
| Total Delay             | 132.1 | 56.4   | 25.5  |
| LOS                     | F     | E      | C     |
| Approach Delay          |       | 62.9   |       |
| Approach LOS            |       | E      |       |
| Queue Length 50th (m)   | 37.0  | 66.0   | 20.3  |
| Queue Length 95th (m)   | #61.1 | #120.8 | 81.0  |
| Internal Link Dist (m)  |       | 292.2  |       |
| Turn Bay Length (m)     | 155.0 |        | 200.0 |
| Base Capacity (vph)     | 342   | 912    | 596   |
| Starvation Cap Reductn  | 0     | 0      | 0     |
| Spillback Cap Reductn   | 60    | 0      | 0     |
| Storage Cap Reductn     | 0     | 0      | 0     |
| Reduced v/c Ratio       | 1.09  | 0.90   | 0.72  |
| Intersection Summary    |       |        |       |



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |   |  |  |  |  |  |
| Traffic Volume (vph)       | 3                                                                                 | 362                                                                               | 1150                                                                              | 13                                                                                | 1                                                                                 | 85                                                                                | 745                                                                                 | 55                                                                                  | 24                                                                                  | 524                                                                                 | 193                                                                                 | 24                                                                                  |
| Future Volume (vph)        | 3                                                                                 | 362                                                                               | 1150                                                                              | 13                                                                                | 1                                                                                 | 85                                                                                | 745                                                                                 | 55                                                                                  | 24                                                                                  | 524                                                                                 | 193                                                                                 | 24                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                     |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3396                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3370                                                                                | 1551                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3421                                                                              | 3396                                                                              | 0                                                                                 | 0                                                                                 | 3392                                                                              | 3370                                                                                | 1525                                                                                | 1745                                                                                | 3502                                                                                | 1540                                                                                | 3417                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 145                                                                                 |                                                                                     |                                                                                     | 178                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 60                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                               |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                                |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 5%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 6%                                                                                  | 3%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 362                                                                               | 1150                                                                              | 13                                                                                | 1                                                                                 | 85                                                                                | 745                                                                                 | 55                                                                                  | 24                                                                                  | 524                                                                                 | 193                                                                                 | 24                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 365                                                                               | 1163                                                                              | 0                                                                                 | 0                                                                                 | 86                                                                                | 745                                                                                 | 55                                                                                  | 24                                                                                  | 524                                                                                 | 193                                                                                 | 24                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 261   | 146   |
| Future Volume (vph)        | 261   | 146   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 60.0  |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3502  | 1582  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3502  | 1556  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 146   |
| Link Speed (k/h)           | 50    |       |
| Link Distance (m)          | 251.2 |       |
| Travel Time (s)            | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 2%    | 1%    |
| Adj. Flow (vph)            | 261   | 146   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 261   | 146   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | R NA  |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 4     |       |
| Permitted Phases           |       | 4     |
| Detector Phase             | 4     | 4     |
| Switch Phase               |       |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 49.0                                                                              |                                                                                   | 12.0                                                                              | 12.0                                                                              | 45.0                                                                                | 45.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 13.9%                                                                             | 13.9%                                                                             | 42.6%                                                                             |                                                                                   | 10.4%                                                                             | 10.4%                                                                             | 39.1%                                                                               | 39.1%                                                                               | 10.4%                                                                               | 36.5%                                                                               | 36.5%                                                                               | 10.4%                                                                               |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 42.9                                                                              |                                                                                   | 5.9                                                                               | 5.9                                                                               | 38.9                                                                                | 38.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                 | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                               | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                                | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 20.2                                                                              | 60.0                                                                              |                                                                                   |                                                                                   | 7.6                                                                               | 45.0                                                                                | 45.0                                                                                |                                                                                     | 5.8                                                                                 | 24.3                                                                                | 5.8                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.18                                                                              | 0.52                                                                              |                                                                                   |                                                                                   | 0.07                                                                              | 0.39                                                                                | 0.39                                                                                |                                                                                     | 0.05                                                                                | 0.21                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.61                                                                              | 0.66                                                                              |                                                                                   |                                                                                   | 0.39                                                                              | 0.57                                                                                | 0.08                                                                                |                                                                                     | 0.27                                                                                | 0.41                                                                                | 0.14                                                                                |
| Control Delay           |                                                                                   | 50.0                                                                              | 25.9                                                                              |                                                                                   |                                                                                   | 81.4                                                                              | 13.1                                                                                | 0.8                                                                                 |                                                                                     | 60.6                                                                                | 46.9                                                                                | 54.1                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 50.0                                                                              | 25.9                                                                              |                                                                                   |                                                                                   | 81.4                                                                              | 13.1                                                                                | 0.8                                                                                 |                                                                                     | 60.6                                                                                | 46.9                                                                                | 54.1                                                                                |
| LOS                     |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   |                                                                                   | F                                                                                 | B                                                                                   | A                                                                                   |                                                                                     | E                                                                                   | D                                                                                   | D                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 31.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 18.9                                                                                |                                                                                     |                                                                                     | 37.5                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   | B                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 36.0                                                                              | 101.5                                                                             |                                                                                   |                                                                                   | 9.9                                                                               | 71.4                                                                                | 0.9                                                                                 |                                                                                     | 4.9                                                                                 | 54.0                                                                                | 2.5                                                                                 |
| Queue Length 95th (m)   |                                                                                   | #72.5                                                                             | #158.2                                                                            |                                                                                   |                                                                                   | 17.7                                                                              | 9.6                                                                                 | 0.0                                                                                 |                                                                                     | 12.9                                                                                | 61.8                                                                                | 17.2                                                                                |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                               |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               |                                                                                     | 100.0                                                                               |                                                                                     | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 602                                                                               | 1773                                                                              |                                                                                   |                                                                                   | 223                                                                               | 1317                                                                                | 684                                                                                 |                                                                                     | 89                                                                                  | 1093                                                                                | 176                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.61                                                                              | 0.66                                                                              |                                                                                   |                                                                                   | 0.39                                                                              | 0.57                                                                                | 0.08                                                                                |                                                                                     | 0.27                                                                                | 0.48                                                                                | 0.14                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 19 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 29.4

Intersection LOS: C

Intersection Capacity Utilization 78.3%

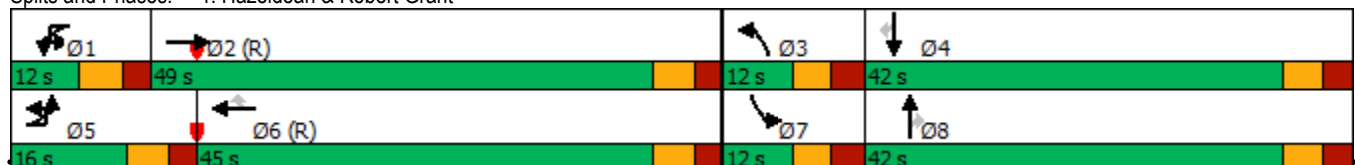
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Hazeldean & Robert Grant





| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 41.1  | 41.1  |
| Total Split (s)         | 42.0  | 42.0  |
| Total Split (%)         | 36.5% | 36.5% |
| Maximum Green (s)       | 35.9  | 35.9  |
| Yellow Time (s)         | 3.3   | 3.3   |
| All-Red Time (s)        | 2.8   | 2.8   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.1   | 6.1   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 28.0  | 28.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 24.3  | 24.3  |
| Actuated g/C Ratio      | 0.21  | 0.21  |
| v/c Ratio               | 0.35  | 0.33  |
| Control Delay           | 38.8  | 7.2   |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 38.8  | 7.2   |
| LOS                     | D     | A     |
| Approach Delay          | 28.9  |       |
| Approach LOS            | C     |       |
| Queue Length 50th (m)   | 24.6  | 0.0   |
| Queue Length 95th (m)   | 31.2  | 13.0  |
| Internal Link Dist (m)  | 227.2 |       |
| Turn Bay Length (m)     |       | 60.0  |
| Base Capacity (vph)     | 1093  | 586   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.24  | 0.25  |
| Intersection Summary    |       |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 1                                                                                 | 107                                                                               | 1087                                                                              | 52                                                                                | 21                                                                                | 868                                                                               | 47                                                                                 | 37                                                                                  | 0                                                                                   | 32                                                                                  | 28                                                                                  | 0                                                                                   |
| Future Volume (vph)        | 1                                                                                 | 107                                                                               | 1087                                                                              | 52                                                                                | 21                                                                                | 868                                                                               | 47                                                                                 | 37                                                                                  | 0                                                                                   | 32                                                                                  | 28                                                                                  | 0                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 75.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 180.0                                                                              | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 75.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                    | 10.0                                                                                |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   | 0.97                                                                               | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                              |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1768                                                                              | 3409                                                                              | 0                                                                                 | 1751                                                                              | 3402                                                                              | 1567                                                                               | 1751                                                                                | 1537                                                                                | 0                                                                                   | 1768                                                                                | 1843                                                                                |
| Flt Permitted              |                                                                                   | 0.278                                                                             |                                                                                   |                                                                                   | 0.249                                                                             |                                                                                   |                                                                                    | 0.757                                                                               |                                                                                     |                                                                                     | 0.736                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 516                                                                               | 3409                                                                              | 0                                                                                 | 458                                                                               | 3402                                                                              | 1518                                                                               | 1386                                                                                | 1537                                                                                | 0                                                                                   | 1361                                                                                | 1843                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 9                                                                                 |                                                                                   |                                                                                   |                                                                                   | 89                                                                                 |                                                                                     | 121                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                    |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |
| Link Distance (m)          |                                                                                   |                                                                                   | 297.5                                                                             |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                    |                                                                                     | 259.5                                                                               |                                                                                     |                                                                                     | 237.4                                                                               |
| Travel Time (s)            |                                                                                   |                                                                                   | 17.9                                                                              |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                    |                                                                                     | 18.7                                                                                |                                                                                     |                                                                                     | 17.1                                                                                |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 4%                                                                                | 2%                                                                                | 2%                                                                                | 5%                                                                                | 2%                                                                                 | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  | 2%                                                                                  |
| Adj. Flow (vph)            | 1                                                                                 | 107                                                                               | 1087                                                                              | 52                                                                                | 21                                                                                | 868                                                                               | 47                                                                                 | 37                                                                                  | 0                                                                                   | 32                                                                                  | 28                                                                                  | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 108                                                                               | 1139                                                                              | 0                                                                                 | 21                                                                                | 868                                                                               | 47                                                                                 | 37                                                                                  | 32                                                                                  | 0                                                                                   | 28                                                                                  | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                               | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                    |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                    |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                 | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                  | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                              | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                                | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                                | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                    |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                    |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                    |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | pm+pt                                                                             | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                               | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                |                                                                                     |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |
| Permitted Phases           | 2                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                  | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 | 6                                                                                  | 8                                                                                   | 8                                                                                   |                                                                                     | 4                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | 7     |
| Traffic Volume (vph)       | 17    |
| Future Volume (vph)        | 17    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 40.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.98  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1552  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 273   |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 17    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 17    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | Cl+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 4     |
| Detector Phase             | 4     |
| Switch Phase               |       |

2: Hazeldean & Roger Griffiths  
AM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 11.2                                                                              | 11.2                                                                              | 31.3                                                                              |                                                                                   | 31.3                                                                              | 31.3                                                                              | 31.3                                                                               | 31.2                                                                                | 31.2                                                                                |                                                                                     | 31.2                                                                                | 31.2                                                                                |
| Total Split (s)         | 20.0                                                                              | 20.0                                                                              | 82.0                                                                              |                                                                                   | 62.0                                                                              | 62.0                                                                              | 62.0                                                                               | 33.0                                                                                | 33.0                                                                                |                                                                                     | 33.0                                                                                | 33.0                                                                                |
| Total Split (%)         | 17.4%                                                                             | 17.4%                                                                             | 71.3%                                                                             |                                                                                   | 53.9%                                                                             | 53.9%                                                                             | 53.9%                                                                              | 28.7%                                                                               | 28.7%                                                                               |                                                                                     | 28.7%                                                                               | 28.7%                                                                               |
| Maximum Green (s)       | 13.8                                                                              | 13.8                                                                              | 75.7                                                                              |                                                                                   | 55.7                                                                              | 55.7                                                                              | 55.7                                                                               | 26.8                                                                                | 26.8                                                                                |                                                                                     | 26.8                                                                                | 26.8                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.3                                                                                 | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.5                                                                               | 2.5                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                               | 2.6                                                                               | 2.6                                                                                | 2.9                                                                                 | 2.9                                                                                 |                                                                                     | 2.9                                                                                 | 2.9                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.2                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               | 6.3                                                                                | 6.2                                                                                 | 6.2                                                                                 |                                                                                     | 6.2                                                                                 | 6.2                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               | Lag                                                                               | Lag                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | C-Max                                                                             | C-Max                                                                             | C-Max                                                                              | None                                                                                | None                                                                                |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   | 18.0                                                                              | 18.0                                                                              | 18.0                                                                               | 18.0                                                                                | 18.0                                                                                |                                                                                     | 18.0                                                                                | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 92.8                                                                              | 94.0                                                                              |                                                                                   | 79.3                                                                              | 79.3                                                                              | 79.3                                                                               | 13.0                                                                                | 13.0                                                                                |                                                                                     | 13.0                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.81                                                                              | 0.82                                                                              |                                                                                   | 0.69                                                                              | 0.69                                                                              | 0.69                                                                               | 0.11                                                                                | 0.11                                                                                |                                                                                     | 0.11                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.22                                                                              | 0.41                                                                              |                                                                                   | 0.07                                                                              | 0.37                                                                              | 0.04                                                                               | 0.24                                                                                | 0.11                                                                                |                                                                                     | 0.18                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 4.5                                                                               | 3.8                                                                               |                                                                                   | 6.0                                                                               | 10.0                                                                              | 2.0                                                                                | 47.9                                                                                | 0.8                                                                                 |                                                                                     | 46.4                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 4.5                                                                               | 3.8                                                                               |                                                                                   | 6.0                                                                               | 10.0                                                                              | 2.0                                                                                | 47.9                                                                                | 0.8                                                                                 |                                                                                     | 46.4                                                                                |                                                                                     |
| LOS                     |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   | A                                                                                 | B                                                                                 | A                                                                                  | D                                                                                   | A                                                                                   |                                                                                     | D                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 3.9                                                                               |                                                                                   |                                                                                   | 9.5                                                                               |                                                                                    |                                                                                     | 26.1                                                                                |                                                                                     |                                                                                     | 28.9                                                                                |
| Approach LOS            |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                    |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 2.7                                                                               | 15.3                                                                              |                                                                                   | 1.9                                                                               | 63.5                                                                              | 1.7                                                                                | 7.3                                                                                 | 0.0                                                                                 |                                                                                     | 5.5                                                                                 |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | m10.3                                                                             | 44.8                                                                              |                                                                                   | m4.8                                                                              | 107.8                                                                             | 3.6                                                                                | 14.6                                                                                | 0.0                                                                                 |                                                                                     | 11.9                                                                                |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 273.5                                                                             |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                    |                                                                                     | 235.5                                                                               |                                                                                     |                                                                                     | 213.4                                                                               |
| Turn Bay Length (m)     |                                                                                   | 75.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 180.0                                                                              |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 566                                                                               | 2788                                                                              |                                                                                   | 315                                                                               | 2346                                                                              | 1074                                                                               | 322                                                                                 | 450                                                                                 |                                                                                     | 317                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.19                                                                              | 0.41                                                                              |                                                                                   | 0.07                                                                              | 0.37                                                                              | 0.04                                                                               | 0.11                                                                                | 0.07                                                                                |                                                                                     | 0.09                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 10 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.41

Intersection Signal Delay: 7.3

Intersection LOS: A

Intersection Capacity Utilization 71.0%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Hazeldean & Roger Griffiths





| Lane Group              | SBR   |
|-------------------------|-------|
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 31.2  |
| Total Split (s)         | 33.0  |
| Total Split (%)         | 28.7% |
| Maximum Green (s)       | 26.8  |
| Yellow Time (s)         | 3.3   |
| All-Red Time (s)        | 2.9   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.2   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | None  |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 18.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 13.0  |
| Actuated g/C Ratio      | 0.11  |
| v/c Ratio               | 0.04  |
| Control Delay           | 0.2   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.2   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.0   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 40.0  |
| Base Capacity (vph)     | 571   |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.03  |
| Intersection Summary    |       |



3: Mantra/Tillage & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |  |
| Traffic Volume (vph)       | 45                                                                                | 1050                                                                              | 12                                                                                | 22                                                                                | 808                                                                               | 113                                                                               | 23                                                                                 | 0                                                                                   | 93                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Future Volume (vph)        | 45                                                                                | 1050                                                                              | 12                                                                                | 22                                                                                | 808                                                                               | 113                                                                               | 23                                                                                 | 0                                                                                   | 93                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 80.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 105.0                                                                             | 55.0                                                                               |                                                                                     | 0.0                                                                                 | 35.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 2                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)           | 60.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                               |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 0.97                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.97                                                                              | 0.99                                                                               | 0.98                                                                                |                                                                                     | 0.99                                                                                | 0.98                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.858                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 3455                                                                              | 0                                                                                 | 1768                                                                              | 3537                                                                              | 1551                                                                              | 1768                                                                               | 1522                                                                                | 0                                                                                   | 3332                                                                                | 1569                                                                                | 0                                                                                   |
| Flt Permitted              | 0.280                                                                             |                                                                                   |                                                                                   | 0.214                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 520                                                                               | 3455                                                                              | 0                                                                                 | 398                                                                               | 3537                                                                              | 1503                                                                              | 1757                                                                               | 1522                                                                                | 0                                                                                   | 3298                                                                                | 1569                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   | 153                                                                               |                                                                                    | 328                                                                                 |                                                                                     |                                                                                     | 36                                                                                  |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                    | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                    | 289.2                                                                               |                                                                                     |                                                                                     | 233.8                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                    | 20.8                                                                                |                                                                                     |                                                                                     | 16.8                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 16%                                                                               | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                 | 1%                                                                                  | 3%                                                                                  | 4%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 45                                                                                | 1050                                                                              | 12                                                                                | 22                                                                                | 808                                                                               | 113                                                                               | 23                                                                                 | 0                                                                                   | 93                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 45                                                                                | 1062                                                                              | 0                                                                                 | 22                                                                                | 808                                                                               | 113                                                                               | 23                                                                                 | 93                                                                                  | 0                                                                                   | 74                                                                                  | 38                                                                                  | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | R NA                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |                                                                                     |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                | Perm                                                                              | Prot                                                                               | NA                                                                                  |                                                                                     | Prot                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 3                                                                                  | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector Phase             | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 | 6                                                                                 | 3                                                                                  | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

3: Mantra/Tillage & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

| Lane Group              | EBL   | EBT   | EBR | WBL   | WBT   | WBR   | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
|-------------------------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Minimum Initial (s)     | 5.0   | 10.0  |     | 5.0   | 10.0  | 10.0  | 5.0   | 10.0  |     | 5.0   | 10.0  |     |
| Minimum Split (s)       | 11.1  | 31.3  |     | 11.1  | 31.3  | 31.3  | 11.5  | 31.5  |     | 11.5  | 31.5  |     |
| Total Split (s)         | 12.0  | 43.0  |     | 12.0  | 43.0  | 43.0  | 28.0  | 32.0  |     | 28.0  | 32.0  |     |
| Total Split (%)         | 10.4% | 37.4% |     | 10.4% | 37.4% | 37.4% | 24.3% | 27.8% |     | 24.3% | 27.8% |     |
| Maximum Green (s)       | 5.9   | 36.7  |     | 5.9   | 36.7  | 36.7  | 21.5  | 25.5  |     | 21.5  | 25.5  |     |
| Yellow Time (s)         | 3.7   | 3.7   |     | 3.7   | 3.7   | 3.7   | 3.3   | 3.3   |     | 3.3   | 3.3   |     |
| All-Red Time (s)        | 2.4   | 2.6   |     | 2.4   | 2.6   | 2.6   | 3.2   | 3.2   |     | 3.2   | 3.2   |     |
| Lost Time Adjust (s)    | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)     | 6.1   | 6.3   |     | 6.1   | 6.3   | 6.3   | 6.5   | 6.5   |     | 6.5   | 6.5   |     |
| Lead/Lag                | Lead  | Lag   |     | Lead  | Lag   | Lag   | Lag   | Lead  |     | Lag   | Lead  |     |
| Lead-Lag Optimize?      |       |       |     |       |       |       |       |       |     |       |       |     |
| Vehicle Extension (s)   | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode             | None  | C-Max |     | None  | C-Max | C-Max | None  | None  |     | None  | None  |     |
| Walk Time (s)           |       | 7.0   |     |       | 7.0   | 7.0   |       | 7.0   |     |       | 7.0   |     |
| Flash Dont Walk (s)     |       | 18.0  |     |       | 18.0  | 18.0  |       | 18.0  |     |       | 18.0  |     |
| Pedestrian Calls (#/hr) |       | 5     |     |       | 5     | 5     |       | 5     |     |       | 5     |     |
| Act Effct Green (s)     | 75.4  | 72.1  |     | 72.0  | 66.8  | 66.8  | 7.6   | 13.0  |     | 7.9   | 15.7  |     |
| Actuated g/C Ratio      | 0.66  | 0.63  |     | 0.63  | 0.58  | 0.58  | 0.07  | 0.11  |     | 0.07  | 0.14  |     |
| v/c Ratio               | 0.11  | 0.49  |     | 0.07  | 0.39  | 0.12  | 0.20  | 0.20  |     | 0.32  | 0.16  |     |
| Control Delay           | 6.8   | 17.4  |     | 10.0  | 16.7  | 1.6   | 53.7  | 1.0   |     | 54.3  | 15.3  |     |
| Queue Delay             | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay             | 6.8   | 17.4  |     | 10.0  | 16.7  | 1.6   | 53.7  | 1.0   |     | 54.3  | 15.3  |     |
| LOS                     | A     | B     |     | A     | B     | A     | D     | A     |     | D     | B     |     |
| Approach Delay          |       | 17.0  |     |       | 14.7  |       |       | 11.4  |     |       | 41.0  |     |
| Approach LOS            |       | B     |     |       | B     |       |       | B     |     |       | D     |     |
| Queue Length 50th (m)   | 2.8   | 96.6  |     | 1.3   | 46.8  | 0.0   | 4.6   | 0.0   |     | 7.6   | 0.4   |     |
| Queue Length 95th (m)   | 9.4   | 102.0 |     | 5.7   | 85.2  | 4.6   | 12.0  | 0.0   |     | 14.2  | 8.4   |     |
| Internal Link Dist (m)  |       | 263.2 |     |       | 771.2 |       |       | 265.2 |     |       | 209.8 |     |
| Turn Bay Length (m)     | 80.0  |       |     | 70.0  |       | 105.0 | 55.0  |       |     | 35.0  |       |     |
| Base Capacity (vph)     | 414   | 2167  |     | 323   | 2054  | 937   | 330   | 592   |     | 622   | 375   |     |
| Starvation Cap Reductn  | 0     | 0     |     | 0     | 0     | 0     | 0     | 0     |     | 0     | 0     |     |
| Spillback Cap Reductn   | 0     | 0     |     | 0     | 0     | 0     | 0     | 0     |     | 0     | 0     |     |
| Storage Cap Reductn     | 0     | 0     |     | 0     | 0     | 0     | 0     | 0     |     | 0     | 0     |     |
| Reduced v/c Ratio       | 0.11  | 0.49  |     | 0.07  | 0.39  | 0.12  | 0.07  | 0.16  |     | 0.12  | 0.10  |     |

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 98 (85%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 16.9

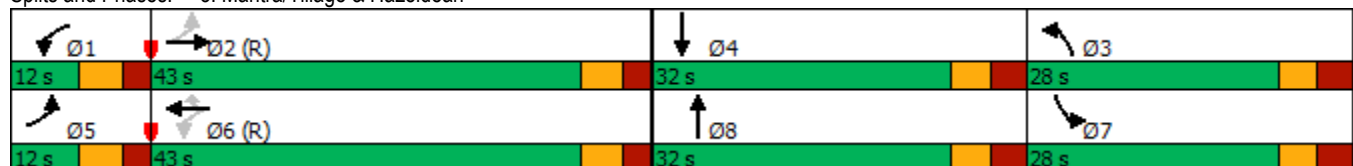
Intersection LOS: B

Intersection Capacity Utilization 60.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: Mantra/Tillage & Hazeldean



4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 286                                                                               | 984                                                                               | 199                                                                               | 5                                                                                 | 154                                                                               | 459                                                                                | 211                                                                                 | 207                                                                                 | 938                                                                                 | 307                                                                                 | 209                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 286                                                                               | 984                                                                               | 199                                                                               | 5                                                                                 | 154                                                                               | 459                                                                                | 211                                                                                 | 207                                                                                 | 938                                                                                 | 307                                                                                 | 209                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     | 75.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.98                                                                              |                                                                                   | 1.00                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3213                                                                              | 3468                                                                              | 1508                                                                              | 0                                                                                 | 3398                                                                              | 3435                                                                               | 1537                                                                                | 3300                                                                                | 3468                                                                                | 1567                                                                                | 3179                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3203                                                                              | 3468                                                                              | 1479                                                                              | 0                                                                                 | 3393                                                                              | 3435                                                                               | 1504                                                                                | 3284                                                                                | 3468                                                                                | 1538                                                                                | 3171                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 199                                                                               |                                                                                   |                                                                                   |                                                                                    | 228                                                                                 |                                                                                     |                                                                                     | 228                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                    | 4                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 8%                                                                                | 3%                                                                                | 6%                                                                                | 1%                                                                                | 2%                                                                                | 4%                                                                                 | 4%                                                                                  | 5%                                                                                  | 3%                                                                                  | 2%                                                                                  | 9%                                                                                  |
| Adj. Flow (vph)            | 7                                                                                 | 286                                                                               | 984                                                                               | 199                                                                               | 5                                                                                 | 154                                                                               | 459                                                                                | 211                                                                                 | 207                                                                                 | 938                                                                                 | 307                                                                                 | 209                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 293                                                                               | 984                                                                               | 199                                                                               | 0                                                                                 | 159                                                                               | 459                                                                                | 211                                                                                 | 207                                                                                 | 938                                                                                 | 307                                                                                 | 209                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 510   | 362   |
| Future Volume (vph)        | 510   | 362   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 200.0 |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3402  | 1508  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3402  | 1481  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 235   |
| Link Speed (k/h)           | 70    |       |
| Link Distance (m)          | 316.2 |       |
| Travel Time (s)            | 16.3  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Confl. Bikes (#/hr)        |       |       |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 5%    | 6%    |
| Adj. Flow (vph)            | 510   | 362   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 510   | 362   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | Right |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | Cl+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 6     |       |
| Permitted Phases           |       | 6     |
| Detector Phase             | 6     | 6     |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                                | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 21.0                                                                              | 21.0                                                                              | 43.0                                                                              | 43.0                                                                              | 14.0                                                                              | 14.0                                                                              | 36.0                                                                                | 36.0                                                                                | 17.0                                                                                | 36.0                                                                                | 36.0                                                                                | 17.0                                                                                |
| Total Split (%)         | 19.1%                                                                             | 19.1%                                                                             | 39.1%                                                                             | 39.1%                                                                             | 12.7%                                                                             | 12.7%                                                                             | 32.7%                                                                               | 32.7%                                                                               | 15.5%                                                                               | 32.7%                                                                               | 32.7%                                                                               | 15.5%                                                                               |
| Maximum Green (s)       | 14.5                                                                              | 14.5                                                                              | 36.5                                                                              | 36.5                                                                              | 7.5                                                                               | 7.5                                                                               | 29.5                                                                                | 29.5                                                                                | 10.5                                                                                | 29.5                                                                                | 29.5                                                                                | 10.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                 | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                                | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                                | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 13.6                                                                              | 35.0                                                                              | 35.0                                                                              |                                                                                   | 7.5                                                                               | 28.9                                                                                | 28.9                                                                                | 10.2                                                                                | 31.2                                                                                | 31.2                                                                                | 10.3                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              | 0.32                                                                              | 0.32                                                                              |                                                                                   | 0.07                                                                              | 0.26                                                                                | 0.26                                                                                | 0.09                                                                                | 0.28                                                                                | 0.28                                                                                | 0.09                                                                                |
| v/c Ratio               |                                                                                   | 0.74                                                                              | 0.89                                                                              | 0.33                                                                              |                                                                                   | 0.69                                                                              | 0.51                                                                                | 0.37                                                                                | 0.68                                                                                | 0.96                                                                                | 0.51                                                                                | 0.70                                                                                |
| Control Delay           |                                                                                   | 58.2                                                                              | 46.8                                                                              | 5.3                                                                               |                                                                                   | 60.8                                                                              | 39.0                                                                                | 14.0                                                                                | 65.4                                                                                | 50.9                                                                                | 8.6                                                                                 | 57.2                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 58.2                                                                              | 46.8                                                                              | 5.3                                                                               |                                                                                   | 60.8                                                                              | 39.0                                                                                | 14.0                                                                                | 65.4                                                                                | 50.9                                                                                | 8.6                                                                                 | 57.2                                                                                |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | D                                                                                   | B                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   | E                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 43.5                                                                              |                                                                                   |                                                                                   |                                                                                   | 36.8                                                                                |                                                                                     |                                                                                     | 44.0                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 28.9                                                                              | 94.8                                                                              | 0.0                                                                               |                                                                                   | 16.1                                                                              | 45.5                                                                                | 4.0                                                                                 | 14.2                                                                                | ~99.6                                                                               | 24.5                                                                                | 20.9                                                                                |
| Queue Length 95th (m)   |                                                                                   | 42.0                                                                              | #119.1                                                                            | 14.1                                                                              |                                                                                   | #28.7                                                                             | 59.9                                                                                | 32.9                                                                                | 33.8                                                                                | #137.9                                                                              | 7.2                                                                                 | #30.2                                                                               |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                               |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                     | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Base Capacity (vph)     |                                                                                   | 423                                                                               | 1150                                                                              | 623                                                                               |                                                                                   | 231                                                                               | 921                                                                                 | 570                                                                                 | 317                                                                                 | 982                                                                                 | 599                                                                                 | 306                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.69                                                                              | 0.86                                                                              | 0.32                                                                              |                                                                                   | 0.69                                                                              | 0.50                                                                                | 0.37                                                                                | 0.65                                                                                | 0.96                                                                                | 0.51                                                                                | 0.68                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 76 (69%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 39.8

Intersection LOS: D

Intersection Capacity Utilization 88.8%

ICU Level of Service E

Analysis Period (min) 15

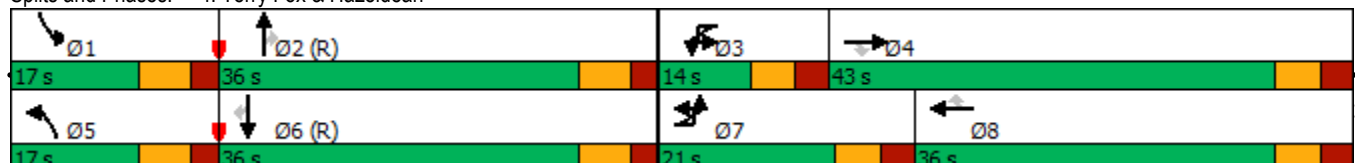
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

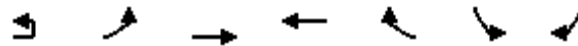
Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean





| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Switch Phase            |       |       |
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 35.5  | 35.5  |
| Total Split (s)         | 36.0  | 36.0  |
| Total Split (%)         | 32.7% | 32.7% |
| Maximum Green (s)       | 29.5  | 29.5  |
| Yellow Time (s)         | 4.2   | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 22.0  | 22.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 31.3  | 31.3  |
| Actuated g/C Ratio      | 0.28  | 0.28  |
| v/c Ratio               | 0.53  | 0.61  |
| Control Delay           | 30.6  | 18.3  |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 30.6  | 18.3  |
| LOS                     | C     | B     |
| Approach Delay          | 31.6  |       |
| Approach LOS            | C     |       |
| Queue Length 50th (m)   | 46.0  | 29.3  |
| Queue Length 95th (m)   | 61.5  | 66.1  |
| Internal Link Dist (m)  | 292.2 |       |
| Turn Bay Length (m)     |       | 200.0 |
| Base Capacity (vph)     | 967   | 589   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.53  | 0.61  |
| Intersection Summary    |       |       |



| Lane Group                 | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 4     | 121   | 1166  | 936   | 72    | 74    | 68    |
| Future Volume (vph)        | 4     | 121   | 1166  | 936   | 72    | 74    | 68    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 35.0  |       |       | 0.0   | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       |       | 0     | 1     | 1     |
| Taper Length (m)           |       | 40.0  |       |       |       | 40.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  |
| Ped Bike Factor            |       | 1.00  |       | 1.00  |       | 0.99  | 0.98  |
| Frt                        |       |       |       | 0.989 |       |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1719  | 3468  | 3424  | 0     | 1768  | 1537  |
| Flt Permitted              |       | 0.271 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 488   | 3468  | 3424  | 0     | 1747  | 1500  |
| Right Turn on Red          |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 14    |       |       | 68    |
| Link Speed (k/h)           |       |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 157.6 | 314.8 |       | 401.6 |       |
| Travel Time (s)            |       |       | 9.5   | 18.9  |       | 28.9  |       |
| Confl. Peds. (#/hr)        |       | 10    |       |       | 10    | 10    | 10    |
| Peak Hour Factor           | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 1%    | 4%    | 3%    | 3%    | 1%    | 1%    | 4%    |
| Adj. Flow (vph)            | 4     | 121   | 1166  | 936   | 72    | 74    | 68    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 125   | 1166  | 1008  | 0     | 74    | 68    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | L NA  | Left  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 8.0   | 4.0   |       | 4.0   |       |
| Link Offset(m)             |       |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 2     |       | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Thru  |       | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 10.0  |       | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 0.6   |       | 2.0   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex | CI+Ex | CI+Ex |       | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       |       | CI+Ex | CI+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | NA    |       | Perm  | Perm  |
| Protected Phases           |       |       | 2     | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       |       |       | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     |       | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |



| Lane Group              | EBU   | EBL   | EBT   | WBT   | WBR | SBL   | SBR   |
|-------------------------|-------|-------|-------|-------|-----|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  | 10.0  | 10.0  |     | 10.0  | 10.0  |
| Minimum Split (s)       | 16.2  | 16.2  | 16.2  | 31.2  |     | 34.1  | 34.1  |
| Total Split (s)         | 76.0  | 76.0  | 76.0  | 76.0  |     | 34.0  | 34.0  |
| Total Split (%)         | 69.1% | 69.1% | 69.1% | 69.1% |     | 30.9% | 30.9% |
| Maximum Green (s)       | 69.8  | 69.8  | 69.8  | 69.8  |     | 27.9  | 27.9  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7   | 3.7   |     | 3.3   | 3.3   |
| All-Red Time (s)        | 2.5   | 2.5   | 2.5   | 2.5   |     | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.2   | 6.2   | 6.2   |     | 6.1   | 6.1   |
| Lead/Lag                |       |       |       |       |     |       |       |
| Lead-Lag Optimize?      |       |       |       |       |     |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max | C-Max | C-Max |     | None  | None  |
| Walk Time (s)           |       |       |       | 7.0   |     | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |       |       | 18.0  |     | 21.0  | 21.0  |
| Pedestrian Calls (#/hr) |       |       |       | 10    |     | 10    | 10    |
| Act Effct Green (s)     |       | 88.3  | 88.3  | 88.3  |     | 13.9  | 13.9  |
| Actuated g/C Ratio      |       | 0.80  | 0.80  | 0.80  |     | 0.13  | 0.13  |
| v/c Ratio               |       | 0.32  | 0.42  | 0.37  |     | 0.34  | 0.27  |
| Control Delay           |       | 16.3  | 13.5  | 5.2   |     | 59.9  | 24.0  |
| Queue Delay             |       | 0.0   | 0.4   | 0.0   |     | 0.0   | 0.0   |
| Total Delay             |       | 16.3  | 13.9  | 5.2   |     | 59.9  | 24.0  |
| LOS                     |       | B     | B     | A     |     | E     | C     |
| Approach Delay          |       |       | 14.1  | 5.2   |     | 42.7  |       |
| Approach LOS            |       |       | B     | A     |     | D     |       |
| Queue Length 50th (m)   |       | 13.8  | 68.2  | 23.3  |     | 14.9  | 3.1   |
| Queue Length 95th (m)   |       | m26.8 | 119.4 | 61.8  |     | m17.8 | m7.5  |
| Internal Link Dist (m)  |       |       | 133.6 | 290.8 |     | 377.6 |       |
| Turn Bay Length (m)     |       | 35.0  |       |       |     | 30.0  |       |
| Base Capacity (vph)     |       | 391   | 2782  | 2750  |     | 443   | 431   |
| Starvation Cap Reductn  |       | 0     | 957   | 0     |     | 0     | 0     |
| Spillback Cap Reductn   |       | 0     | 0     | 0     |     | 0     | 0     |
| Storage Cap Reductn     |       | 0     | 0     | 0     |     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.32  | 0.64  | 0.37  |     | 0.17  | 0.16  |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 73 (66%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.42

Intersection Signal Delay: 12.1

Intersection LOS: B

Intersection Capacity Utilization 66.1%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Hazeldean & Edgewater





|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1559                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1129                                                                                |
| Future Volume (vph)        | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1559                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1129                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.887                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                    | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1317                                                                              | 0                                                                                 | 1567                                                                              | 1516                                                                              | 0                                                                                 | 1768                                                                               | 3489                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3402                                                                                |
| Flt Permitted              | 0.693                                                                             |                                                                                   |                                                                                   | 0.755                                                                             |                                                                                   |                                                                                   | 0.230                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.125                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1284                                                                              | 1317                                                                              | 0                                                                                 | 1238                                                                              | 1516                                                                              | 0                                                                                 | 427                                                                                | 3489                                                                                | 0                                                                                   | 0                                                                                   | 228                                                                                 | 3402                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 32                                                                                |                                                                                   |                                                                                    | 3                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                    | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                    | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 33%                                                                               | 14%                                                                               | 50%                                                                               | 3%                                                                                | 1%                                                                                 | 2%                                                                                  | 3%                                                                                  | 1%                                                                                  | 3%                                                                                  | 5%                                                                                  |
| Adj. Flow (vph)            | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1559                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1129                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 14                                                                                | 4                                                                                 | 0                                                                                 | 14                                                                                | 99                                                                                | 0                                                                                 | 1                                                                                  | 1589                                                                                | 0                                                                                   | 0                                                                                   | 161                                                                                 | 1129                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                    | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        |       |
| Traffic Volume (vph)       | 12    |
| Future Volume (vph)        | 12    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1480  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1436  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 35    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 8%    |
| Adj. Flow (vph)            | 12    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 12    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.5                                                                              | 36.5                                                                              |                                                                                   | 36.5                                                                              | 36.5                                                                              |                                                                                   | 34.5                                                                               | 34.5                                                                                |                                                                                     | 34.5                                                                                | 34.5                                                                                | 34.5                                                                                |
| Total Split (s)         | 37.0                                                                              | 37.0                                                                              |                                                                                   | 37.0                                                                              | 37.0                                                                              |                                                                                   | 73.0                                                                               | 73.0                                                                                |                                                                                     | 73.0                                                                                | 73.0                                                                                | 73.0                                                                                |
| Total Split (%)         | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 66.4%                                                                              | 66.4%                                                                               |                                                                                     | 66.4%                                                                               | 66.4%                                                                               | 66.4%                                                                               |
| Maximum Green (s)       | 30.5                                                                              | 30.5                                                                              |                                                                                   | 30.5                                                                              | 30.5                                                                              |                                                                                   | 66.5                                                                               | 66.5                                                                                |                                                                                     | 66.5                                                                                | 66.5                                                                                | 66.5                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 3.2                                                                               | 3.2                                                                               |                                                                                   | 3.2                                                                               | 3.2                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                                | 6.5                                                                                 |                                                                                     |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 21.0                                                                                | 21.0                                                                                | 21.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 14.6                                                                              | 14.6                                                                              |                                                                                   | 14.6                                                                              | 14.6                                                                              |                                                                                   | 82.4                                                                               | 82.4                                                                                |                                                                                     |                                                                                     | 82.4                                                                                | 82.4                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.75                                                                               | 0.75                                                                                |                                                                                     |                                                                                     | 0.75                                                                                | 0.75                                                                                |
| v/c Ratio               | 0.08                                                                              | 0.02                                                                              |                                                                                   | 0.09                                                                              | 0.43                                                                              |                                                                                   | 0.00                                                                               | 0.61                                                                                |                                                                                     |                                                                                     | 0.95                                                                                | 0.44                                                                                |
| Control Delay           | 38.4                                                                              | 25.0                                                                              |                                                                                   | 61.2                                                                              | 54.6                                                                              |                                                                                   | 4.0                                                                                | 6.2                                                                                 |                                                                                     |                                                                                     | 75.4                                                                                | 6.9                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 38.4                                                                              | 25.0                                                                              |                                                                                   | 61.2                                                                              | 54.6                                                                              |                                                                                   | 4.0                                                                                | 6.2                                                                                 |                                                                                     |                                                                                     | 75.4                                                                                | 6.9                                                                                 |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | E                                                                                 | D                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | E                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 35.4                                                                              |                                                                                   |                                                                                   | 55.4                                                                              |                                                                                   |                                                                                    | 6.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 15.3                                                                                |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 2.6                                                                               | 0.2                                                                               |                                                                                   | 3.0                                                                               | 15.5                                                                              |                                                                                   | 0.0                                                                                | 5.2                                                                                 |                                                                                     |                                                                                     | 18.5                                                                                | 30.0                                                                                |
| Queue Length 95th (m)   | 6.6                                                                               | 2.6                                                                               |                                                                                   | m9.0                                                                              | 32.8                                                                              |                                                                                   | m0.1                                                                               | 40.2                                                                                |                                                                                     |                                                                                     | #48.2                                                                               | 79.8                                                                                |
| Internal Link Dist (m)  |                                                                                   | 193.1                                                                             |                                                                                   |                                                                                   | 258.1                                                                             |                                                                                   |                                                                                    | 229.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 336.0                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 65.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |                                                                                     |
| Base Capacity (vph)     | 356                                                                               | 367                                                                               |                                                                                   | 343                                                                               | 443                                                                               |                                                                                   | 320                                                                                | 2615                                                                                |                                                                                     |                                                                                     | 170                                                                                 | 2549                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.04                                                                              | 0.01                                                                              |                                                                                   | 0.04                                                                              | 0.22                                                                              |                                                                                   | 0.00                                                                               | 0.61                                                                                |                                                                                     |                                                                                     | 0.95                                                                                | 0.44                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 16 (15%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 12.1

Intersection LOS: B

Intersection Capacity Utilization 83.1%

ICU Level of Service E

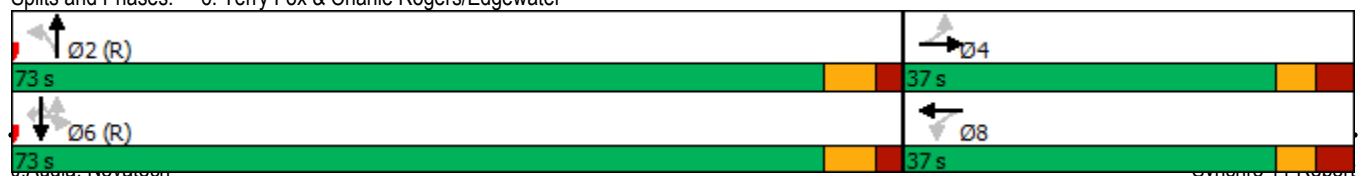
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 73.0  |
| Total Split (%)         | 66.4% |
| Maximum Green (s)       | 66.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 82.4  |
| Actuated g/C Ratio      | 0.75  |
| v/c Ratio               | 0.01  |
| Control Delay           | 0.2   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.2   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.5   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1085  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (vph)       | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1415                                                                                | 1                                                                                   | 0                                                                                   | 948                                                                                 | 0                                                                                   |
| Future Volume (vph)        | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1415                                                                                | 1                                                                                   | 0                                                                                   | 948                                                                                 | 0                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 35.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 | 55.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)           | 25.0                                                                              |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     | 50.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.98                                                                              |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1861                                                                              | 1553                                                                              | 0                                                                                 | 1768                                                                              | 1861                                                                              | 0                                                                                 | 1768                                                                               | 3468                                                                                | 0                                                                                   | 1861                                                                                | 3370                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   | 0.769                                                                             |                                                                                   |                                                                                   | 0.301                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1861                                                                              | 1553                                                                              | 0                                                                                 | 1422                                                                              | 1861                                                                              | 0                                                                                 | 559                                                                                | 3468                                                                                | 0                                                                                   | 1861                                                                                | 3370                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 152                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 207.5                                                                             |                                                                                   |                                                                                   | 88.7                                                                              |                                                                                   |                                                                                    | 316.2                                                                               |                                                                                     |                                                                                     | 253.3                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 14.9                                                                              |                                                                                   |                                                                                   | 10.6                                                                              |                                                                                   |                                                                                    | 16.3                                                                                |                                                                                     |                                                                                     | 13.0                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 3%                                                                                  | 1%                                                                                  | 1%                                                                                  | 6%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1415                                                                                | 1                                                                                   | 0                                                                                   | 948                                                                                 | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 3                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1416                                                                                | 0                                                                                   | 0                                                                                   | 948                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                               | Left                                                                                | Right                                                                               | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 12.0                                                                                |                                                                                     |                                                                                     | 12.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |                                                                                     |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              |                                                                                   |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.5                                                                               | 32.5                                                                                |                                                                                     | 32.5                                                                                | 32.5                                                                                |                                                                                     |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              |                                                                                   | 77.0                                                                               | 77.0                                                                                |                                                                                     | 77.0                                                                                | 77.0                                                                                |                                                                                     |
| Total Split (%)         | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 70.0%                                                                              | 70.0%                                                                               |                                                                                     | 70.0%                                                                               | 70.0%                                                                               |                                                                                     |
| Maximum Green (s)       | 26.8                                                                              | 26.8                                                                              |                                                                                   | 26.8                                                                              | 26.8                                                                              |                                                                                   | 70.5                                                                               | 70.5                                                                                |                                                                                     | 70.5                                                                                | 70.5                                                                                |                                                                                     |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 |                                                                                     |
| All-Red Time (s)        | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.5                                                                                | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                               | 19.0                                                                                |                                                                                     | 19.0                                                                                | 19.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 13.2                                                                              |                                                                                   | 13.2                                                                              |                                                                                   |                                                                                   | 102.3                                                                              | 102.3                                                                               |                                                                                     |                                                                                     | 102.3                                                                               |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.93                                                                               | 0.93                                                                                |                                                                                     |                                                                                     | 0.93                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.01                                                                              |                                                                                   | 0.01                                                                              |                                                                                   |                                                                                   | 0.02                                                                               | 0.44                                                                                |                                                                                     |                                                                                     | 0.30                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 0.0                                                                               |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                   | 9.3                                                                                | 9.6                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 0.0                                                                               |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                   | 9.3                                                                                | 9.6                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| LOS                     |                                                                                   | A                                                                                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                    | 9.6                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 0.0                                                                               |                                                                                   | 0.2                                                                               |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | 0.0                                                                               |                                                                                   | 1.4                                                                               |                                                                                   |                                                                                   | m1.8                                                                               | m155.1                                                                              |                                                                                     |                                                                                     | 1.6                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   | 183.5                                                                             |                                                                                   |                                                                                   | 64.7                                                                              |                                                                                   |                                                                                    | 292.2                                                                               |                                                                                     |                                                                                     | 229.3                                                                               |                                                                                     |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 493                                                                               |                                                                                   | 346                                                                               |                                                                                   |                                                                                   | 520                                                                                | 3224                                                                                |                                                                                     |                                                                                     | 3133                                                                                |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.01                                                                              |                                                                                   | 0.00                                                                              |                                                                                   |                                                                                   | 0.02                                                                               | 0.44                                                                                |                                                                                     |                                                                                     | 0.30                                                                                |                                                                                     |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 26 (24%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 5.9

Intersection LOS: A

Intersection Capacity Utilization 62.3%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Terry Fox & Tony Graham Rec



8: Terry Fox & Sobey's  
AM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1398                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 842                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1398                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 842                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 10.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 30.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.91                                                                                | 0.91                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              | 0.98                                                                              | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.910                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.995                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.997                                                                               |
| Flt Protected              |                                                                                   | 0.986                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1526                                                                              | 0                                                                                 | 0                                                                                 | 1742                                                                              | 1567                                                                              | 1581                                                                               | 5048                                                                                | 0                                                                                   | 0                                                                                   | 1722                                                                                | 3424                                                                                |
| Flt Permitted              |                                                                                   | 0.899                                                                             |                                                                                   |                                                                                   | 0.715                                                                             |                                                                                   | 0.279                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.171                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1389                                                                              | 0                                                                                 | 0                                                                                 | 1297                                                                              | 1537                                                                              | 463                                                                                | 5048                                                                                | 0                                                                                   | 0                                                                                   | 309                                                                                 | 3424                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 16                                                                                |                                                                                   |                                                                                   |                                                                                   | 109                                                                               |                                                                                    | 9                                                                                   |                                                                                     |                                                                                     |                                                                                     | 3                                                                                   |
| Link Speed (k/h)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 132.0                                                                             |                                                                                   |                                                                                   | 152.6                                                                             |                                                                                   |                                                                                    | 140.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 142.7                                                                               |
| Travel Time (s)            |                                                                                   | 15.8                                                                              |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                    | 7.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.3                                                                                 |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 29%                                                                               | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 13%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 4%                                                                                  | 4%                                                                                  |
| Adj. Flow (vph)            | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1398                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 842                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 24                                                                                | 0                                                                                 | 0                                                                                 | 31                                                                                | 52                                                                                | 8                                                                                  | 1450                                                                                | 0                                                                                   | 0                                                                                   | 31                                                                                  | 860                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                              | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 5                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |

|                            |      |    |
|----------------------------|------|----|
| Lane Group                 | SBR  | Ø9 |
| Lane Configurations        |      |    |
| Traffic Volume (vph)       | 18   |    |
| Future Volume (vph)        | 18   |    |
| Ideal Flow (vphpl)         | 1800 |    |
| Storage Length (m)         | 0.0  |    |
| Storage Lanes              | 0    |    |
| Taper Length (m)           |      |    |
| Lane Util. Factor          | 0.95 |    |
| Ped Bike Factor            |      |    |
| Frt                        |      |    |
| Flt Protected              |      |    |
| Satd. Flow (prot)          | 0    |    |
| Flt Permitted              |      |    |
| Satd. Flow (perm)          | 0    |    |
| Right Turn on Red          | Yes  |    |
| Satd. Flow (RTOR)          |      |    |
| Link Speed (k/h)           |      |    |
| Link Distance (m)          |      |    |
| Travel Time (s)            |      |    |
| Confl. Peds. (#/hr)        | 5    |    |
| Confl. Bikes (#/hr)        |      |    |
| Peak Hour Factor           | 1.00 |    |
| Heavy Vehicles (%)         | 1%   |    |
| Adj. Flow (vph)            | 18   |    |
| Shared Lane Traffic (%)    |      |    |
| Lane Group Flow (vph)      | 0    |    |
| Enter Blocked Intersection | No   |    |
| Lane Alignment             | R NA |    |
| Median Width(m)            |      |    |
| Link Offset(m)             |      |    |
| Crosswalk Width(m)         |      |    |
| Two way Left Turn Lane     |      |    |
| Headway Factor             | 1.01 |    |
| Turning Speed (k/h)        | 14   |    |
| Number of Detectors        |      |    |
| Detector Template          |      |    |
| Leading Detector (m)       |      |    |
| Trailing Detector (m)      |      |    |
| Detector 1 Position(m)     |      |    |
| Detector 1 Size(m)         |      |    |
| Detector 1 Type            |      |    |
| Detector 1 Channel         |      |    |
| Detector 1 Extend (s)      |      |    |
| Detector 1 Queue (s)       |      |    |
| Detector 1 Delay (s)       |      |    |
| Detector 2 Position(m)     |      |    |
| Detector 2 Size(m)         |      |    |
| Detector 2 Type            |      |    |
| Detector 2 Channel         |      |    |
| Detector 2 Extend (s)      |      |    |
| Turn Type                  |      |    |
| Protected Phases           | 9    |    |
| Permitted Phases           |      |    |
| Detector Phase             |      |    |



8: Terry Fox & Sobey's  
AM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 5.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 11.2                                                                               | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                | 26.0                                                                                |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 15.0                                                                               | 72.0                                                                                |                                                                                     | 57.0                                                                                | 57.0                                                                                | 57.0                                                                                |
| Total Split (%)         | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 30.0%                                                                             | 30.0%                                                                             | 30.0%                                                                             | 13.6%                                                                              | 65.5%                                                                               |                                                                                     | 51.8%                                                                               | 51.8%                                                                               | 51.8%                                                                               |
| Maximum Green (s)       | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 9.0                                                                                | 66.0                                                                                |                                                                                     | 51.0                                                                                | 51.0                                                                                | 51.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 1.8                                                                                | 1.8                                                                                 |                                                                                     | 1.8                                                                                 | 1.8                                                                                 | 1.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               | 6.0                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 6.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               |                                                                                    | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 17.0                                                                              | 17.0                                                                              |                                                                                   | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              |                                                                                    | 13.0                                                                                |                                                                                     | 13.0                                                                                | 13.0                                                                                | 13.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 |                                                                                    | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 12.8                                                                              |                                                                                   |                                                                                   | 12.8                                                                              | 12.8                                                                              | 82.6                                                                               | 82.6                                                                                |                                                                                     |                                                                                     | 80.2                                                                                | 80.2                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.12                                                                              | 0.12                                                                              | 0.75                                                                               | 0.75                                                                                |                                                                                     |                                                                                     | 0.73                                                                                | 0.73                                                                                |
| v/c Ratio               |                                                                                   | 0.14                                                                              |                                                                                   |                                                                                   | 0.21                                                                              | 0.19                                                                              | 0.02                                                                               | 0.38                                                                                |                                                                                     |                                                                                     | 0.14                                                                                | 0.34                                                                                |
| Control Delay           |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              | 1.5                                                                               | 2.6                                                                                | 4.1                                                                                 |                                                                                     |                                                                                     | 4.5                                                                                 | 2.7                                                                                 |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.1                                                                                 |
| Total Delay             |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              | 1.5                                                                               | 2.6                                                                                | 4.1                                                                                 |                                                                                     |                                                                                     | 4.5                                                                                 | 2.8                                                                                 |
| LOS                     |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 | A                                                                                 | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 17.8                                                                              |                                                                                   |                                                                                    | 4.1                                                                                 |                                                                                     |                                                                                     |                                                                                     | 2.8                                                                                 |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 1.5                                                                               |                                                                                   |                                                                                   | 5.8                                                                               | 0.0                                                                               | 0.3                                                                                | 43.8                                                                                |                                                                                     |                                                                                     | 0.4                                                                                 | 5.2                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 12.4                                                                              | 0.0                                                                               | m0.3                                                                               | 27.2                                                                                |                                                                                     |                                                                                     | m2.1                                                                                | 18.6                                                                                |
| Internal Link Dist (m)  |                                                                                   | 108.0                                                                             |                                                                                   |                                                                                   | 128.6                                                                             |                                                                                   |                                                                                    | 116.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 118.7                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 306                                                                               | 446                                                                               | 439                                                                                | 3793                                                                                |                                                                                     |                                                                                     | 225                                                                                 | 2496                                                                                |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 357                                                                                 |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.07                                                                              |                                                                                   |                                                                                   | 0.10                                                                              | 0.12                                                                              | 0.02                                                                               | 0.38                                                                                |                                                                                     |                                                                                     | 0.14                                                                                | 0.40                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 80 (73%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 4.3

Intersection LOS: A

Intersection Capacity Utilization 66.7%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Terry Fox & Sobey's



|                         |     |     |
|-------------------------|-----|-----|
| Lane Group              | SBR | Ø9  |
| Switch Phase            |     |     |
| Minimum Initial (s)     |     | 3.0 |
| Minimum Split (s)       |     | 5.0 |
| Total Split (s)         |     | 5.0 |
| Total Split (%)         |     | 5%  |
| Maximum Green (s)       |     | 3.0 |
| Yellow Time (s)         |     | 2.0 |
| All-Red Time (s)        |     | 0.0 |
| Lost Time Adjust (s)    |     |     |
| Total Lost Time (s)     |     |     |
| Lead/Lag                |     |     |
| Lead-Lag Optimize?      |     |     |
| Vehicle Extension (s)   |     | 3.0 |
| Recall Mode             |     | Max |
| Walk Time (s)           |     |     |
| Flash Dont Walk (s)     |     |     |
| Pedestrian Calls (#/hr) |     |     |
| Act Effct Green (s)     |     |     |
| Actuated g/C Ratio      |     |     |
| v/c Ratio               |     |     |
| Control Delay           |     |     |
| Queue Delay             |     |     |
| Total Delay             |     |     |
| LOS                     |     |     |
| Approach Delay          |     |     |
| Approach LOS            |     |     |
| Queue Length 50th (m)   |     |     |
| Queue Length 95th (m)   |     |     |
| Internal Link Dist (m)  |     |     |
| Turn Bay Length (m)     |     |     |
| Base Capacity (vph)     |     |     |
| Starvation Cap Reductn  |     |     |
| Spillback Cap Reductn   |     |     |
| Storage Cap Reductn     |     |     |
| Reduced v/c Ratio       |     |     |
| Intersection Summary    |     |     |

9: Terry Fox & Halkirk/Winchester  
AM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                  | 1386                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 776                                                                                 |
| Future Volume (vph)        | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                  | 1386                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 776                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 15.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 65.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 120.0                                                                               |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 20.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.910                                                                             |                                                                                   |                                                                                   | 0.857                                                                             |                                                                                   |                                                                                    | 0.996                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1462                                                                              | 0                                                                                 | 1734                                                                              | 1555                                                                              | 0                                                                                 | 1069                                                                               | 3484                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3435                                                                                |
| Flt Permitted              | 0.689                                                                             |                                                                                   |                                                                                   | 0.741                                                                             |                                                                                   |                                                                                   | 0.351                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.158                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1276                                                                              | 1462                                                                              | 0                                                                                 | 1345                                                                              | 1555                                                                              | 0                                                                                 | 394                                                                                | 3484                                                                                | 0                                                                                   | 0                                                                                   | 294                                                                                 | 3435                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 15                                                                                |                                                                                   |                                                                                   | 44                                                                                |                                                                                   |                                                                                    | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 40                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 65.4                                                                              |                                                                                   |                                                                                   | 381.2                                                                             |                                                                                   |                                                                                    | 479.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 200.7                                                                               |
| Travel Time (s)            |                                                                                   | 4.7                                                                               |                                                                                   |                                                                                   | 34.3                                                                              |                                                                                   |                                                                                    | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     | 10.3                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 10                                                                                  |                                                                                     | 10                                                                                  |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 20%                                                                               | 13%                                                                               | 3%                                                                                | 20%                                                                               | 1%                                                                                | 67%                                                                                | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 4%                                                                                  |
| Adj. Flow (vph)            | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                  | 1386                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 776                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 20                                                                                | 25                                                                                | 0                                                                                 | 30                                                                                | 106                                                                               | 0                                                                                 | 6                                                                                  | 1427                                                                                | 0                                                                                   | 0                                                                                   | 77                                                                                  | 776                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                              | CI+Ex                                                                               |                                                                                     | CI+Ex                                                                               | CI+Ex                                                                               | CI+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                    | CI+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | CI+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        |       |
| Traffic Volume (vph)       | 10    |
| Future Volume (vph)        | 10    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 55.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1531  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 30    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 10    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 10    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | Cl+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

9: Terry Fox & Halkirk/Winchester  
AM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 28.3                                                                               | 28.3                                                                                |                                                                                     | 28.3                                                                                | 28.3                                                                                | 28.3                                                                                |
| Total Split (s)         | 38.0                                                                              | 38.0                                                                              |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 72.0                                                                               | 72.0                                                                                |                                                                                     | 72.0                                                                                | 72.0                                                                                | 72.0                                                                                |
| Total Split (%)         | 34.5%                                                                             | 34.5%                                                                             |                                                                                   | 34.5%                                                                             | 34.5%                                                                             |                                                                                   | 65.5%                                                                              | 65.5%                                                                               |                                                                                     | 65.5%                                                                               | 65.5%                                                                               | 65.5%                                                                               |
| Maximum Green (s)       | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 65.7                                                                               | 65.7                                                                                |                                                                                     | 65.7                                                                                | 65.7                                                                                | 65.7                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.1                                                                                | 2.1                                                                                 |                                                                                     | 2.1                                                                                 | 2.1                                                                                 | 2.1                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.3                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 15.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 10                                                                                 | 10                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 14.4                                                                              | 14.4                                                                              |                                                                                   | 14.4                                                                              | 14.4                                                                              |                                                                                   | 83.3                                                                               | 83.3                                                                                |                                                                                     |                                                                                     | 83.3                                                                                | 83.3                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.76                                                                               | 0.76                                                                                |                                                                                     |                                                                                     | 0.76                                                                                | 0.76                                                                                |
| v/c Ratio               | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.17                                                                              | 0.44                                                                              |                                                                                   | 0.02                                                                               | 0.54                                                                                |                                                                                     |                                                                                     | 0.35                                                                                | 0.30                                                                                |
| Control Delay           | 39.7                                                                              | 23.0                                                                              |                                                                                   | 41.2                                                                              | 30.4                                                                              |                                                                                   | 6.2                                                                                | 7.6                                                                                 |                                                                                     |                                                                                     | 23.3                                                                                | 12.2                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 39.7                                                                              | 23.0                                                                              |                                                                                   | 41.2                                                                              | 30.4                                                                              |                                                                                   | 6.2                                                                                | 7.6                                                                                 |                                                                                     |                                                                                     | 23.3                                                                                | 12.2                                                                                |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | C                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 30.4                                                                              |                                                                                   |                                                                                   | 32.8                                                                              |                                                                                   |                                                                                    | 7.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 13.2                                                                                |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 3.7                                                                               | 1.9                                                                               |                                                                                   | 5.6                                                                               | 11.8                                                                              |                                                                                   | 0.2                                                                                | 40.2                                                                                |                                                                                     |                                                                                     | 7.5                                                                                 | 39.3                                                                                |
| Queue Length 95th (m)   | 8.4                                                                               | 7.5                                                                               |                                                                                   | 11.3                                                                              | 22.1                                                                              |                                                                                   | 2.0                                                                                | 110.1                                                                               |                                                                                     |                                                                                     | 23.6                                                                                | 71.7                                                                                |
| Internal Link Dist (m)  |                                                                                   | 41.4                                                                              |                                                                                   |                                                                                   | 357.2                                                                             |                                                                                   |                                                                                    | 455.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 176.7                                                                               |
| Turn Bay Length (m)     | 15.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 120.0                                                                               |                                                                                     |
| Base Capacity (vph)     | 371                                                                               | 435                                                                               |                                                                                   | 391                                                                               | 483                                                                               |                                                                                   | 298                                                                                | 2638                                                                                |                                                                                     |                                                                                     | 222                                                                                 | 2600                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.05                                                                              | 0.06                                                                              |                                                                                   | 0.08                                                                              | 0.22                                                                              |                                                                                   | 0.02                                                                               | 0.54                                                                                |                                                                                     |                                                                                     | 0.35                                                                                | 0.30                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 40 (36%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 11.3

Intersection LOS: B

Intersection Capacity Utilization 76.6%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Terry Fox & Halkirk/Winchester



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 28.3  |
| Total Split (s)         | 72.0  |
| Total Split (%)         | 65.5% |
| Maximum Green (s)       | 65.7  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.1   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.3   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 15.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 83.3  |
| Actuated g/C Ratio      | 0.76  |
| v/c Ratio               | 0.01  |
| Control Delay           | 6.3   |
| Queue Delay             | 0.0   |
| Total Delay             | 6.3   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.1   |
| Queue Length 95th (m)   | m1.0  |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 55.0  |
| Base Capacity (vph)     | 1166  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |   |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 340                                                                               | 1206                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1599                                                                                | 114                                                                                 | 21                                                                                  | 304                                                                                 | 135                                                                                 | 148                                                                                 |
| Future Volume (vph)        | 2                                                                                 | 340                                                                               | 1206                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1599                                                                                | 114                                                                                 | 21                                                                                  | 304                                                                                 | 135                                                                                 | 148                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                     |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 0.99                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3537                                                                                | 1582                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3427                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3391                                                                              | 3537                                                                                | 1555                                                                                | 1746                                                                                | 3502                                                                                | 1539                                                                                | 3410                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 128                                                                                 |                                                                                     |                                                                                     | 133                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                               |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                                |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 340                                                                               | 1206                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1599                                                                                | 114                                                                                 | 21                                                                                  | 304                                                                                 | 135                                                                                 | 148                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 342                                                                               | 1228                                                                              | 0                                                                                 | 0                                                                                 | 185                                                                               | 1599                                                                                | 114                                                                                 | 21                                                                                  | 304                                                                                 | 135                                                                                 | 148                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 97                                                                                | 14                                                                                | 97                                                                                |                                                                                     | 14                                                                                  | 97                                                                                  |                                                                                     | 97                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 493   | 440   |
| Future Volume (vph)        | 493   | 440   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 60.0  |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3502  | 1582  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3502  | 1555  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 171   |
| Link Speed (k/h)           | 50    |       |
| Link Distance (m)          | 251.2 |       |
| Travel Time (s)            | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 2%    | 1%    |
| Adj. Flow (vph)            | 493   | 440   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 493   | 440   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | R NA  |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 4     |       |
| Permitted Phases           |       | 4     |
| Detector Phase             | 4     | 4     |
| Switch Phase               |       |       |



|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                               | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                               | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 61.0                                                                              |                                                                                   | 15.0                                                                              | 15.0                                                                              | 60.0                                                                               | 60.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 12.3%                                                                             | 12.3%                                                                             | 46.9%                                                                             |                                                                                   | 11.5%                                                                             | 11.5%                                                                             | 46.2%                                                                              | 46.2%                                                                               | 9.2%                                                                                | 32.3%                                                                               | 32.3%                                                                               | 9.2%                                                                                |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 54.9                                                                              |                                                                                   | 8.9                                                                               | 8.9                                                                               | 53.9                                                                               | 53.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                              | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                               | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 17.5                                                                              | 63.2                                                                              |                                                                                   |                                                                                   | 10.2                                                                              | 55.9                                                                               | 55.9                                                                                | 5.8                                                                                 | 26.3                                                                                | 26.3                                                                                | 5.9                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.13                                                                              | 0.49                                                                              |                                                                                   |                                                                                   | 0.08                                                                              | 0.43                                                                               | 0.43                                                                                | 0.04                                                                                | 0.20                                                                                | 0.20                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.74                                                                              | 0.72                                                                              |                                                                                   |                                                                                   | 0.70                                                                              | 1.05                                                                               | 0.15                                                                                | 0.27                                                                                | 0.43                                                                                | 0.32                                                                                | 0.95                                                                                |
| Control Delay           |                                                                                   | 65.3                                                                              | 31.5                                                                              |                                                                                   |                                                                                   | 85.5                                                                              | 63.1                                                                               | 1.8                                                                                 | 68.8                                                                                | 45.5                                                                                | 8.2                                                                                 | 122.6                                                                               |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 65.3                                                                              | 31.5                                                                              |                                                                                   |                                                                                   | 85.5                                                                              | 63.1                                                                               | 1.8                                                                                 | 68.8                                                                                | 45.5                                                                                | 8.2                                                                                 | 122.6                                                                               |
| LOS                     |                                                                                   | E                                                                                 | C                                                                                 |                                                                                   |                                                                                   | F                                                                                 | E                                                                                  | A                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   | F                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 38.9                                                                              |                                                                                   |                                                                                   |                                                                                   | 61.6                                                                               |                                                                                     |                                                                                     | 35.6                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | E                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 42.1                                                                              | 133.8                                                                             |                                                                                   |                                                                                   | 19.5                                                                              | ~229.2                                                                             | 4.1                                                                                 | 4.9                                                                                 | 31.1                                                                                | 0.4                                                                                 | 18.2                                                                                |
| Queue Length 95th (m)   |                                                                                   | #81.1                                                                             | 160.8                                                                             |                                                                                   |                                                                                   | m#37.7                                                                            | #259.4                                                                             | m2.4                                                                                | 13.1                                                                                | 41.8                                                                                | 14.3                                                                                | #37.9                                                                               |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                              |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                    | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 461                                                                               | 1698                                                                              |                                                                                   |                                                                                   | 265                                                                               | 1520                                                                               | 741                                                                                 | 79                                                                                  | 967                                                                                 | 521                                                                                 | 155                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.74                                                                              | 0.72                                                                              |                                                                                   |                                                                                   | 0.70                                                                              | 1.05                                                                               | 0.15                                                                                | 0.27                                                                                | 0.31                                                                                | 0.26                                                                                | 0.95                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 15 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 51.1

Intersection LOS: D

Intersection Capacity Utilization 110.7%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

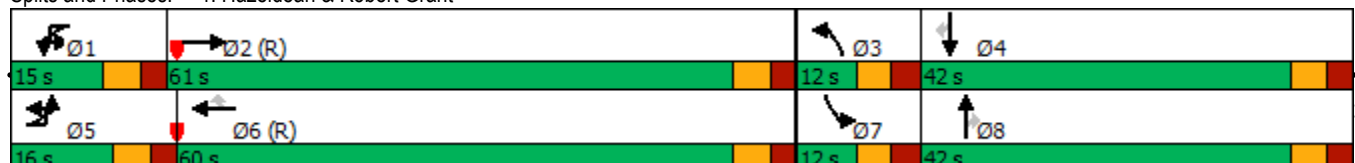
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Hazeldean & Robert Grant





| Lane Group              | SBT   | SBR    |
|-------------------------|-------|--------|
| Minimum Initial (s)     | 10.0  | 10.0   |
| Minimum Split (s)       | 41.1  | 41.1   |
| Total Split (s)         | 42.0  | 42.0   |
| Total Split (%)         | 32.3% | 32.3%  |
| Maximum Green (s)       | 35.9  | 35.9   |
| Yellow Time (s)         | 3.3   | 3.3    |
| All-Red Time (s)        | 2.8   | 2.8    |
| Lost Time Adjust (s)    | 0.0   | 0.0    |
| Total Lost Time (s)     | 6.1   | 6.1    |
| Lead/Lag                | Lag   | Lag    |
| Lead-Lag Optimize?      |       |        |
| Vehicle Extension (s)   | 3.0   | 3.0    |
| Recall Mode             | None  | None   |
| Walk Time (s)           | 7.0   | 7.0    |
| Flash Dont Walk (s)     | 28.0  | 28.0   |
| Pedestrian Calls (#/hr) | 5     | 5      |
| Act Effct Green (s)     | 31.1  | 31.1   |
| Actuated g/C Ratio      | 0.24  | 0.24   |
| v/c Ratio               | 0.59  | 0.88   |
| Control Delay           | 46.3  | 47.4   |
| Queue Delay             | 0.0   | 0.0    |
| Total Delay             | 46.3  | 47.4   |
| LOS                     | D     | D      |
| Approach Delay          | 57.2  |        |
| Approach LOS            | E     |        |
| Queue Length 50th (m)   | 53.6  | 63.9   |
| Queue Length 95th (m)   | 67.5  | #103.8 |
| Internal Link Dist (m)  | 227.2 |        |
| Turn Bay Length (m)     |       | 60.0   |
| Base Capacity (vph)     | 967   | 553    |
| Starvation Cap Reductn  | 0     | 0      |
| Spillback Cap Reductn   | 0     | 0      |
| Storage Cap Reductn     | 0     | 0      |
| Reduced v/c Ratio       | 0.51  | 0.80   |
| Intersection Summary    |       |        |

2: Hazeldean & Roger Griffiths  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |  |
| Traffic Volume (vph)       | 166                                                                               | 1306                                                                              | 104                                                                               | 52                                                                                | 1569                                                                              | 61                                                                                | 102                                                                                 | 0                                                                                   | 39                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Future Volume (vph)        | 166                                                                               | 1306                                                                              | 104                                                                               | 52                                                                                | 1569                                                                              | 61                                                                                | 102                                                                                 | 0                                                                                   | 39                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 75.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 180.0                                                                             | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 40.0                                                                                |                                                                                     | 40.0                                                                                |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   | 0.97                                                                              | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                |                                                                                     | 0.98                                                                                |
| Frt                        |                                                                                   | 0.989                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 3487                                                                              | 0                                                                                 | 1751                                                                              | 3502                                                                              | 1582                                                                              | 1751                                                                                | 1536                                                                                | 0                                                                                   | 1768                                                                                | 1843                                                                                | 1582                                                                                |
| Flt Permitted              | 0.091                                                                             |                                                                                   |                                                                                   | 0.190                                                                             |                                                                                   |                                                                                   | 0.757                                                                               |                                                                                     |                                                                                     | 0.732                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 169                                                                               | 3487                                                                              | 0                                                                                 | 350                                                                               | 3502                                                                              | 1530                                                                              | 1384                                                                                | 1536                                                                                | 0                                                                                   | 1352                                                                                | 1843                                                                                | 1551                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   | 79                                                                                |                                                                                     | 89                                                                                  |                                                                                     |                                                                                     |                                                                                     | 196                                                                                 |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 297.5                                                                             |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                     | 259.5                                                                               |                                                                                     |                                                                                     | 237.4                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 17.9                                                                              |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                     | 18.7                                                                                |                                                                                     |                                                                                     | 17.1                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 166                                                                               | 1306                                                                              | 104                                                                               | 52                                                                                | 1569                                                                              | 61                                                                                | 102                                                                                 | 0                                                                                   | 39                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 166                                                                               | 1410                                                                              | 0                                                                                 | 52                                                                                | 1569                                                                              | 61                                                                                | 102                                                                                 | 39                                                                                  | 0                                                                                   | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 97                                                                                | 97                                                                                |                                                                                   | 14                                                                                | 97                                                                                  |                                                                                     | 97                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                | Right                                                                               |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                |                                                                                     | Perm                                                                                |
| Protected Phases           | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                 | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     | 4                                                                                   |
| Detector Phase             | 5                                                                                 | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 | 6                                                                                 | 8                                                                                   | 8                                                                                   |                                                                                     | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

2: Hazeldean & Roger Griffiths  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 11.2                                                                              | 31.3                                                                              |                                                                                   | 31.3                                                                              | 31.3                                                                              | 31.3                                                                              | 31.2                                                                               | 31.2                                                                                |                                                                                     | 31.2                                                                                | 31.2                                                                                | 31.2                                                                                |
| Total Split (s)         | 20.0                                                                              | 97.0                                                                              |                                                                                   | 77.0                                                                              | 77.0                                                                              | 77.0                                                                              | 33.0                                                                               | 33.0                                                                                |                                                                                     | 33.0                                                                                | 33.0                                                                                | 33.0                                                                                |
| Total Split (%)         | 15.4%                                                                             | 74.6%                                                                             |                                                                                   | 59.2%                                                                             | 59.2%                                                                             | 59.2%                                                                             | 25.4%                                                                              | 25.4%                                                                               |                                                                                     | 25.4%                                                                               | 25.4%                                                                               | 25.4%                                                                               |
| Maximum Green (s)       | 13.8                                                                              | 90.7                                                                              |                                                                                   | 70.7                                                                              | 70.7                                                                              | 70.7                                                                              | 26.8                                                                               | 26.8                                                                                |                                                                                     | 26.8                                                                                | 26.8                                                                                | 26.8                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.3                                                                                | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.5                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                               | 2.6                                                                               | 2.6                                                                               | 2.9                                                                                | 2.9                                                                                 |                                                                                     | 2.9                                                                                 | 2.9                                                                                 | 2.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.2                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               | 6.3                                                                               | 6.2                                                                                | 6.2                                                                                 |                                                                                     | 6.2                                                                                 | 6.2                                                                                 | 6.2                                                                                 |
| Lead/Lag                | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               |                                                                                   |                                                                                   | Lag                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | C-Max                                                                             |                                                                                   | C-Max                                                                             | C-Max                                                                             | C-Max                                                                             | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   | 18.0                                                                              |                                                                                   | 18.0                                                                              | 18.0                                                                              | 18.0                                                                              | 18.0                                                                               | 18.0                                                                                |                                                                                     | 18.0                                                                                | 18.0                                                                                | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 101.7                                                                             | 101.6                                                                             |                                                                                   | 83.7                                                                              | 83.7                                                                              | 83.7                                                                              | 15.9                                                                               | 15.9                                                                                |                                                                                     | 15.9                                                                                |                                                                                     | 15.9                                                                                |
| Actuated g/C Ratio      | 0.78                                                                              | 0.78                                                                              |                                                                                   | 0.64                                                                              | 0.64                                                                              | 0.64                                                                              | 0.12                                                                               | 0.12                                                                                |                                                                                     | 0.12                                                                                |                                                                                     | 0.12                                                                                |
| v/c Ratio               | 0.60                                                                              | 0.52                                                                              |                                                                                   | 0.23                                                                              | 0.70                                                                              | 0.06                                                                              | 0.60                                                                               | 0.15                                                                                |                                                                                     | 0.57                                                                                |                                                                                     | 0.19                                                                                |
| Control Delay           | 26.4                                                                              | 12.0                                                                              |                                                                                   | 3.4                                                                               | 8.0                                                                               | 0.2                                                                               | 67.6                                                                               | 1.2                                                                                 |                                                                                     | 65.8                                                                                |                                                                                     | 1.2                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay             | 26.4                                                                              | 12.0                                                                              |                                                                                   | 3.4                                                                               | 8.0                                                                               | 0.2                                                                               | 67.6                                                                               | 1.2                                                                                 |                                                                                     | 65.8                                                                                |                                                                                     | 1.2                                                                                 |
| LOS                     | C                                                                                 | B                                                                                 |                                                                                   | A                                                                                 | A                                                                                 | A                                                                                 | E                                                                                  | A                                                                                   |                                                                                     | E                                                                                   |                                                                                     | A                                                                                   |
| Approach Delay          |                                                                                   | 13.5                                                                              |                                                                                   |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                    | 49.3                                                                                |                                                                                     |                                                                                     | 38.2                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Queue Length 50th (m)   | 26.1                                                                              | 99.2                                                                              |                                                                                   | 0.6                                                                               | 156.0                                                                             | 0.0                                                                               | 23.4                                                                               | 0.0                                                                                 |                                                                                     | 21.5                                                                                |                                                                                     | 0.0                                                                                 |
| Queue Length 95th (m)   | m45.1                                                                             | m128.3                                                                            |                                                                                   | m0.7                                                                              | 21.6                                                                              | m0.0                                                                              | 37.4                                                                               | 0.0                                                                                 |                                                                                     | 34.9                                                                                |                                                                                     | 0.0                                                                                 |
| Internal Link Dist (m)  |                                                                                   | 273.5                                                                             |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                    | 235.5                                                                               |                                                                                     |                                                                                     | 213.4                                                                               |                                                                                     |
| Turn Bay Length (m)     | 75.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 180.0                                                                             |                                                                                    |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     | 40.0                                                                                |
| Base Capacity (vph)     | 309                                                                               | 2727                                                                              |                                                                                   | 225                                                                               | 2255                                                                              | 1013                                                                              | 285                                                                                | 387                                                                                 |                                                                                     | 278                                                                                 |                                                                                     | 475                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       | 0.54                                                                              | 0.52                                                                              |                                                                                   | 0.23                                                                              | 0.70                                                                              | 0.06                                                                              | 0.36                                                                               | 0.10                                                                                |                                                                                     | 0.34                                                                                |                                                                                     | 0.15                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 114 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 13.3

Intersection LOS: B

Intersection Capacity Utilization 85.0%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Hazeldean & Roger Griffiths



3: Mantra/Tillage & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 1                                                                                 | 82                                                                                | 1208                                                                              | 24                                                                                | 89                                                                                | 1527                                                                              | 212                                                                                 | 20                                                                                  | 2                                                                                   | 43                                                                                  | 177                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 1                                                                                 | 82                                                                                | 1208                                                                              | 24                                                                                | 89                                                                                | 1527                                                                              | 212                                                                                 | 20                                                                                  | 2                                                                                   | 43                                                                                  | 177                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 80.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 105.0                                                                               | 55.0                                                                                |                                                                                     | 0.0                                                                                 | 35.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 2                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 60.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                     | 35.0                                                                                |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.97                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.95                                                                                | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                | 0.98                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                               |                                                                                     | 0.857                                                                               |                                                                                     |                                                                                     | 0.851                                                                               |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1768                                                                              | 3523                                                                              | 0                                                                                 | 1701                                                                              | 3537                                                                              | 1582                                                                                | 1406                                                                                | 1565                                                                                | 0                                                                                   | 3431                                                                                | 1553                                                                                |
| Flt Permitted              |                                                                                   | 0.071                                                                             |                                                                                   |                                                                                   | 0.137                                                                             |                                                                                   |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 132                                                                               | 3523                                                                              | 0                                                                                 | 245                                                                               | 3537                                                                              | 1510                                                                                | 1397                                                                                | 1565                                                                                | 0                                                                                   | 3389                                                                                | 1553                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   | 182                                                                                 |                                                                                     | 43                                                                                  |                                                                                     |                                                                                     | 143                                                                                 |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |
| Link Distance (m)          |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                     |                                                                                     | 289.2                                                                               |                                                                                     |                                                                                     | 233.8                                                                               |
| Travel Time (s)            |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                     |                                                                                     | 20.8                                                                                |                                                                                     |                                                                                     | 16.8                                                                                |
| Confl. Peds. (#/hr)        |                                                                                   | 10                                                                                |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 10                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 5%                                                                                | 1%                                                                                | 1%                                                                                  | 27%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 1                                                                                 | 82                                                                                | 1208                                                                              | 24                                                                                | 89                                                                                | 1527                                                                              | 212                                                                                 | 20                                                                                  | 2                                                                                   | 43                                                                                  | 177                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 83                                                                                | 1232                                                                              | 0                                                                                 | 89                                                                                | 1527                                                                              | 212                                                                                 | 20                                                                                  | 45                                                                                  | 0                                                                                   | 177                                                                                 | 144                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | R NA                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                               | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | pm+pt                                                                             | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                | Perm                                                                                | Prot                                                                                | NA                                                                                  |                                                                                     | Prot                                                                                | NA                                                                                  |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |
| Permitted Phases           | 2                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 | 6                                                                                   | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



| Lane Group                 | SBR  |
|----------------------------|------|
| Lane Configurations        |      |
| Traffic Volume (vph)       | 143  |
| Future Volume (vph)        | 143  |
| Ideal Flow (vphpl)         | 1800 |
| Storage Length (m)         | 0.0  |
| Storage Lanes              | 0    |
| Taper Length (m)           |      |
| Lane Util. Factor          | 1.00 |
| Ped Bike Factor            |      |
| Frt                        |      |
| Flt Protected              |      |
| Satd. Flow (prot)          | 0    |
| Flt Permitted              |      |
| Satd. Flow (perm)          | 0    |
| Right Turn on Red          | Yes  |
| Satd. Flow (RTOR)          |      |
| Link Speed (k/h)           |      |
| Link Distance (m)          |      |
| Travel Time (s)            |      |
| Confl. Peds. (#/hr)        | 5    |
| Peak Hour Factor           | 1.00 |
| Heavy Vehicles (%)         | 1%   |
| Adj. Flow (vph)            | 143  |
| Shared Lane Traffic (%)    |      |
| Lane Group Flow (vph)      | 0    |
| Enter Blocked Intersection | No   |
| Lane Alignment             | R NA |
| Median Width(m)            |      |
| Link Offset(m)             |      |
| Crosswalk Width(m)         |      |
| Two way Left Turn Lane     |      |
| Headway Factor             | 1.01 |
| Turning Speed (k/h)        | 14   |
| Number of Detectors        |      |
| Detector Template          |      |
| Leading Detector (m)       |      |
| Trailing Detector (m)      |      |
| Detector 1 Position(m)     |      |
| Detector 1 Size(m)         |      |
| Detector 1 Type            |      |
| Detector 1 Channel         |      |
| Detector 1 Extend (s)      |      |
| Detector 1 Queue (s)       |      |
| Detector 1 Delay (s)       |      |
| Detector 2 Position(m)     |      |
| Detector 2 Size(m)         |      |
| Detector 2 Type            |      |
| Detector 2 Channel         |      |
| Detector 2 Extend (s)      |      |
| Turn Type                  |      |
| Protected Phases           |      |
| Permitted Phases           |      |
| Detector Phase             |      |
| Switch Phase               |      |

3: Mantra/Tillage & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 10.0                                                                              | 10.0                                                                               | 5.0                                                                                 | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 10.0                                                                                |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 31.3                                                                              |                                                                                   | 11.1                                                                              | 31.3                                                                              | 31.3                                                                               | 11.5                                                                                | 31.5                                                                                |                                                                                     | 11.5                                                                                | 31.5                                                                                |
| Total Split (s)         | 17.0                                                                              | 17.0                                                                              | 53.0                                                                              |                                                                                   | 17.0                                                                              | 53.0                                                                              | 53.0                                                                               | 28.0                                                                                | 32.0                                                                                |                                                                                     | 28.0                                                                                | 32.0                                                                                |
| Total Split (%)         | 13.1%                                                                             | 13.1%                                                                             | 40.8%                                                                             |                                                                                   | 13.1%                                                                             | 40.8%                                                                             | 40.8%                                                                              | 21.5%                                                                               | 24.6%                                                                               |                                                                                     | 21.5%                                                                               | 24.6%                                                                               |
| Maximum Green (s)       | 10.9                                                                              | 10.9                                                                              | 46.7                                                                              |                                                                                   | 10.9                                                                              | 46.7                                                                              | 46.7                                                                               | 21.5                                                                                | 25.5                                                                                |                                                                                     | 21.5                                                                                | 25.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.3                                                                                 | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.6                                                                               |                                                                                   | 2.4                                                                               | 2.6                                                                               | 2.6                                                                                | 3.2                                                                                 | 3.2                                                                                 |                                                                                     | 3.2                                                                                 | 3.2                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.3                                                                               |                                                                                   | 6.1                                                                               | 6.3                                                                               | 6.3                                                                                | 6.5                                                                                 | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lag                                                                               | Lag                                                                                | Lag                                                                                 | Lead                                                                                |                                                                                     | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             | C-Max                                                                              | None                                                                                | None                                                                                |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                                |                                                                                     | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 18.0                                                                              | 18.0                                                                               |                                                                                     | 18.0                                                                                |                                                                                     |                                                                                     | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 10                                                                                | 10                                                                                 |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 82.0                                                                              | 74.0                                                                              |                                                                                   | 83.6                                                                              | 74.7                                                                              | 74.7                                                                               | 9.6                                                                                 | 13.0                                                                                |                                                                                     | 12.3                                                                                | 20.1                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.63                                                                              | 0.57                                                                              |                                                                                   | 0.64                                                                              | 0.57                                                                              | 0.57                                                                               | 0.07                                                                                | 0.10                                                                                |                                                                                     | 0.09                                                                                | 0.15                                                                                |
| v/c Ratio               |                                                                                   | 0.46                                                                              | 0.61                                                                              |                                                                                   | 0.35                                                                              | 0.75                                                                              | 0.22                                                                               | 0.19                                                                                | 0.23                                                                                |                                                                                     | 0.55                                                                                | 0.40                                                                                |
| Control Delay           |                                                                                   | 25.3                                                                              | 20.2                                                                              |                                                                                   | 13.4                                                                              | 26.2                                                                              | 4.8                                                                                | 58.5                                                                                | 17.6                                                                                |                                                                                     | 62.4                                                                                | 11.1                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 25.3                                                                              | 20.2                                                                              |                                                                                   | 13.4                                                                              | 26.2                                                                              | 4.8                                                                                | 58.5                                                                                | 17.6                                                                                |                                                                                     | 62.4                                                                                | 11.1                                                                                |
| LOS                     |                                                                                   | C                                                                                 | C                                                                                 |                                                                                   | B                                                                                 | C                                                                                 | A                                                                                  | E                                                                                   | B                                                                                   |                                                                                     | E                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 20.6                                                                              |                                                                                   |                                                                                   | 23.1                                                                              |                                                                                    |                                                                                     | 30.2                                                                                |                                                                                     |                                                                                     | 39.4                                                                                |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                    |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | D                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 4.1                                                                               | 78.0                                                                              |                                                                                   | 6.4                                                                               | 134.6                                                                             | 2.9                                                                                | 4.6                                                                                 | 0.5                                                                                 |                                                                                     | 20.9                                                                                | 0.2                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 24.1                                                                              | 153.0                                                                             |                                                                                   | 17.6                                                                              | #246.7                                                                            | 18.4                                                                               | 11.6                                                                                | 9.9                                                                                 |                                                                                     | 31.0                                                                                | 16.3                                                                                |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                    |                                                                                     | 265.2                                                                               |                                                                                     |                                                                                     | 209.8                                                                               |
| Turn Bay Length (m)     |                                                                                   | 80.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 105.0                                                                              | 55.0                                                                                |                                                                                     |                                                                                     | 35.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 224                                                                               | 2005                                                                              |                                                                                   | 288                                                                               | 2033                                                                              | 945                                                                                | 232                                                                                 | 341                                                                                 |                                                                                     | 567                                                                                 | 429                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.37                                                                              | 0.61                                                                              |                                                                                   | 0.31                                                                              | 0.75                                                                              | 0.22                                                                               | 0.09                                                                                | 0.13                                                                                |                                                                                     | 0.31                                                                                | 0.34                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 23.8

Intersection LOS: C

Intersection Capacity Utilization 83.2%

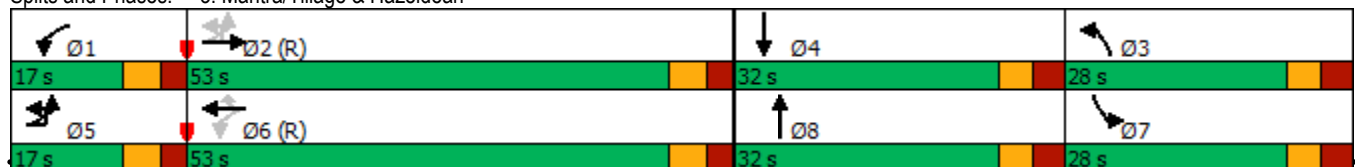
ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Mantra/Tillage & Hazeldean





| Lane Group              | SBR |
|-------------------------|-----|
| Minimum Initial (s)     |     |
| Minimum Split (s)       |     |
| Total Split (s)         |     |
| Total Split (%)         |     |
| Maximum Green (s)       |     |
| Yellow Time (s)         |     |
| All-Red Time (s)        |     |
| Lost Time Adjust (s)    |     |
| Total Lost Time (s)     |     |
| Lead/Lag                |     |
| Lead-Lag Optimize?      |     |
| Vehicle Extension (s)   |     |
| Recall Mode             |     |
| Walk Time (s)           |     |
| Flash Dont Walk (s)     |     |
| Pedestrian Calls (#/hr) |     |
| Act Effct Green (s)     |     |
| Actuated g/C Ratio      |     |
| v/c Ratio               |     |
| Control Delay           |     |
| Queue Delay             |     |
| Total Delay             |     |
| LOS                     |     |
| Approach Delay          |     |
| Approach LOS            |     |
| Queue Length 50th (m)   |     |
| Queue Length 95th (m)   |     |
| Internal Link Dist (m)  |     |
| Turn Bay Length (m)     |     |
| Base Capacity (vph)     |     |
| Starvation Cap Reductn  |     |
| Spillback Cap Reductn   |     |
| Storage Cap Reductn     |     |
| Reduced v/c Ratio       |     |
| Intersection Summary    |     |



4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 479                                                                               | 859                                                                               | 294                                                                               | 14                                                                                | 340                                                                               | 1072                                                                               | 348                                                                                 | 334                                                                                 | 894                                                                                 | 234                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 2                                                                                 | 479                                                                               | 859                                                                               | 294                                                                               | 14                                                                                | 340                                                                               | 1072                                                                               | 348                                                                                 | 334                                                                                 | 894                                                                                 | 234                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.95                                                                              |                                                                                   | 0.99                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 3364                                                                              | 3537                                                                              | 1551                                                                              | 0                                                                                 | 3398                                                                              | 3537                                                                               | 1551                                                                                | 3397                                                                                | 3468                                                                                | 1567                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 3359                                                                              | 3537                                                                              | 1481                                                                              | 0                                                                                 | 3368                                                                              | 3537                                                                               | 1521                                                                                | 3388                                                                                | 3468                                                                                | 1527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 227                                                                               |                                                                                   |                                                                                   |                                                                                    | 169                                                                                 |                                                                                     |                                                                                     | 150                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 24                                                                                |                                                                                   | 24                                                                                |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 3%                                                                                  | 2%                                                                                  | 3%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 479                                                                               | 859                                                                               | 294                                                                               | 14                                                                                | 340                                                                               | 1072                                                                               | 348                                                                                 | 334                                                                                 | 894                                                                                 | 234                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 481                                                                               | 859                                                                               | 294                                                                               | 0                                                                                 | 354                                                                               | 1072                                                                               | 348                                                                                 | 334                                                                                 | 894                                                                                 | 234                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                            |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                 | SBL                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations        |  |  |  |
| Traffic Volume (vph)       | 356                                                                               | 1029                                                                              | 467                                                                               |
| Future Volume (vph)        | 356                                                                               | 1029                                                                              | 467                                                                               |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)         | 155.0                                                                             |                                                                                   | 200.0                                                                             |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              |
| Ped Bike Factor            | 0.99                                                                              |                                                                                   | 0.98                                                                              |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)          | 3431                                                                              | 3502                                                                              | 1567                                                                              |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)          | 3410                                                                              | 3502                                                                              | 1537                                                                              |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 259                                                                               |
| Link Speed (k/h)           |                                                                                   | 70                                                                                |                                                                                   |
| Link Distance (m)          |                                                                                   | 316.2                                                                             |                                                                                   |
| Travel Time (s)            |                                                                                   | 16.3                                                                              |                                                                                   |
| Confl. Peds. (#/hr)        | 10                                                                                |                                                                                   | 5                                                                                 |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 2%                                                                                |
| Adj. Flow (vph)            | 356                                                                               | 1029                                                                              | 467                                                                               |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)      | 357                                                                               | 1029                                                                              | 467                                                                               |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)            |                                                                                   | 10.0                                                                              |                                                                                   |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 | 1                                                                                 |
| Detector Template          | Left                                                                              | Thru                                                                              | Right                                                                             |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              |
| Protected Phases           | 1                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   | 6                                                                                 |
| Detector Phase             | 1                                                                                 | 6                                                                                 | 6                                                                                 |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                                | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 23.0                                                                              | 23.0                                                                              | 42.0                                                                              | 42.0                                                                              | 23.0                                                                              | 23.0                                                                              | 42.0                                                                                | 42.0                                                                                | 18.0                                                                                | 37.0                                                                                | 37.0                                                                                | 18.0                                                                                |
| Total Split (%)         | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                             | 35.0%                                                                             | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                               | 35.0%                                                                               | 15.0%                                                                               | 30.8%                                                                               | 30.8%                                                                               | 15.0%                                                                               |
| Maximum Green (s)       | 16.5                                                                              | 16.5                                                                              | 35.5                                                                              | 35.5                                                                              | 16.5                                                                              | 16.5                                                                              | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                | 11.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                 | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                                | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                                | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 24                                                                                | 24                                                                                |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 16.5                                                                              | 36.2                                                                              | 36.2                                                                              |                                                                                   | 15.8                                                                              | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.30                                                                              | 0.30                                                                              |                                                                                   | 0.13                                                                              | 0.30                                                                                | 0.30                                                                                | 0.10                                                                                | 0.25                                                                                | 0.25                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 1.04                                                                              | 0.80                                                                              | 0.49                                                                              |                                                                                   | 0.79                                                                              | 1.02                                                                                | 0.61                                                                                | 1.03                                                                                | 1.01                                                                                | 0.47                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 103.1                                                                             | 45.7                                                                              | 11.6                                                                              |                                                                                   | 52.0                                                                              | 81.0                                                                                | 33.2                                                                                | 116.3                                                                               | 71.4                                                                                | 10.7                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 103.1                                                                             | 45.7                                                                              | 11.6                                                                              |                                                                                   | 52.0                                                                              | 81.0                                                                                | 33.2                                                                                | 116.3                                                                               | 71.4                                                                                | 10.9                                                                                |                                                                                     |
| LOS                     |                                                                                   | F                                                                                 | D                                                                                 | B                                                                                 |                                                                                   | D                                                                                 | F                                                                                   | C                                                                                   | F                                                                                   | E                                                                                   | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 56.5                                                                              |                                                                                   |                                                                                   |                                                                                   | 65.9                                                                                |                                                                                     |                                                                                     | 72.0                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                   |                                                                                   | E                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | ~58.0                                                                             | 91.2                                                                              | 10.7                                                                              |                                                                                   | 38.8                                                                              | ~127.7                                                                              | 45.7                                                                                | ~33.2                                                                               | ~105.4                                                                              | 15.8                                                                                |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | #88.3                                                                             | 113.7                                                                             | 33.3                                                                              |                                                                                   | #52.4                                                                             | #173.4                                                                              | 83.1                                                                                | #68.6                                                                               | #145.1                                                                              | 9.1                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                               |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                     | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 462                                                                               | 1068                                                                              | 605                                                                               |                                                                                   | 467                                                                               | 1046                                                                                | 568                                                                                 | 325                                                                                 | 881                                                                                 | 499                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 37                                                                                  |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 1.04                                                                              | 0.80                                                                              | 0.49                                                                              |                                                                                   | 0.76                                                                              | 1.02                                                                                | 0.61                                                                                | 1.03                                                                                | 1.01                                                                                | 0.51                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay: 75.1

Intersection LOS: E

Intersection Capacity Utilization 108.5%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

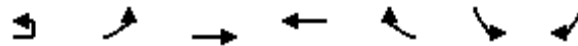
Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean

|                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |
| Ø1                                                                                  | Ø2 (R)                                                                              | Ø3                                                                                  | Ø4                                                                                    |
| 18 s                                                                                | 37 s                                                                                | 23 s                                                                                | 42 s                                                                                  |
|  |  |  |  |
| Ø5                                                                                  | Ø6 (R)                                                                              | Ø7                                                                                  | Ø8                                                                                    |
| 18 s                                                                                | 37 s                                                                                | 23 s                                                                                | 42 s                                                                                  |



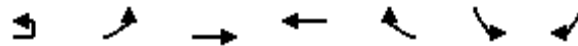
| Lane Group              | SBL   | SBT    | SBR   |
|-------------------------|-------|--------|-------|
| Switch Phase            |       |        |       |
| Minimum Initial (s)     | 5.0   | 10.0   | 10.0  |
| Minimum Split (s)       | 11.5  | 35.5   | 35.5  |
| Total Split (s)         | 18.0  | 37.0   | 37.0  |
| Total Split (%)         | 15.0% | 30.8%  | 30.8% |
| Maximum Green (s)       | 11.5  | 30.5   | 30.5  |
| Yellow Time (s)         | 4.2   | 4.2    | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3    | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0    | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5    | 6.5   |
| Lead/Lag                | Lead  | Lag    | Lag   |
| Lead-Lag Optimize?      |       |        |       |
| Vehicle Extension (s)   | 3.0   | 3.0    | 3.0   |
| Recall Mode             | None  | C-Max  | C-Max |
| Walk Time (s)           |       | 7.0    | 7.0   |
| Flash Dont Walk (s)     |       | 22.0   | 22.0  |
| Pedestrian Calls (#/hr) |       | 10     | 10    |
| Act Effct Green (s)     | 11.5  | 30.5   | 30.5  |
| Actuated g/C Ratio      | 0.10  | 0.25   | 0.25  |
| v/c Ratio               | 1.09  | 1.16   | 0.80  |
| Control Delay           | 126.7 | 123.3  | 32.3  |
| Queue Delay             | 9.0   | 0.0    | 0.0   |
| Total Delay             | 135.7 | 123.3  | 32.3  |
| LOS                     | F     | F      | C     |
| Approach Delay          |       | 102.7  |       |
| Approach LOS            |       | F      |       |
| Queue Length 50th (m)   | ~46.1 | ~135.1 | 29.7  |
| Queue Length 95th (m)   | #74.6 | #174.0 | #92.5 |
| Internal Link Dist (m)  |       | 292.2  |       |
| Turn Bay Length (m)     | 155.0 |        | 200.0 |
| Base Capacity (vph)     | 328   | 890    | 583   |
| Starvation Cap Reductn  | 0     | 0      | 0     |
| Spillback Cap Reductn   | 101   | 0      | 0     |
| Storage Cap Reductn     | 0     | 0      | 0     |
| Reduced v/c Ratio       | 1.57  | 1.16   | 0.80  |
| Intersection Summary    |       |        |       |



| Lane Group                 | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 4     | 78    | 1393  | 1868  | 54    | 99    | 97    |
| Future Volume (vph)        | 4     | 78    | 1393  | 1868  | 54    | 99    | 97    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 35.0  |       |       | 0.0   | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       |       | 0     | 1     | 1     |
| Taper Length (m)           |       | 40.0  |       |       |       | 40.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  |
| Ped Bike Factor            |       |       |       | 1.00  |       | 0.99  | 0.97  |
| Frt                        |       |       |       | 0.996 |       |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1752  | 3537  | 3517  | 0     | 1768  | 1582  |
| Flt Permitted              |       | 0.072 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 133   | 3537  | 3517  | 0     | 1746  | 1533  |
| Right Turn on Red          |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 5     |       |       | 21    |
| Link Speed (k/h)           |       |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 157.6 | 314.8 |       | 401.6 |       |
| Travel Time (s)            |       |       | 9.5   | 18.9  |       | 28.9  |       |
| Confl. Peds. (#/hr)        |       | 17    |       |       | 17    | 10    | 15    |
| Peak Hour Factor           | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 1%    | 2%    | 1%    | 1%    | 1%    | 1%    | 1%    |
| Adj. Flow (vph)            | 4     | 78    | 1393  | 1868  | 54    | 99    | 97    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 82    | 1393  | 1922  | 0     | 99    | 97    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | L NA  | Left  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 8.0   | 4.0   |       | 4.0   |       |
| Link Offset(m)             |       |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 2     |       | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Thru  |       | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 10.0  |       | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 0.6   |       | 2.0   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex | CI+Ex | CI+Ex |       | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       |       | CI+Ex | CI+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | NA    |       | Perm  | Perm  |
| Protected Phases           |       |       | 2     | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       |       |       | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     |       | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |

5: Hazeldean & Edgewater  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic



| Lane Group              | EBU   | EBL    | EBT    | WBT   | WBR | SBL   | SBR   |
|-------------------------|-------|--------|--------|-------|-----|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0   | 10.0   | 10.0  |     | 10.0  | 10.0  |
| Minimum Split (s)       | 16.2  | 16.2   | 16.2   | 31.2  |     | 34.1  | 34.1  |
| Total Split (s)         | 86.0  | 86.0   | 86.0   | 86.0  |     | 34.0  | 34.0  |
| Total Split (%)         | 71.7% | 71.7%  | 71.7%  | 71.7% |     | 28.3% | 28.3% |
| Maximum Green (s)       | 79.8  | 79.8   | 79.8   | 79.8  |     | 27.9  | 27.9  |
| Yellow Time (s)         | 3.7   | 3.7    | 3.7    | 3.7   |     | 3.3   | 3.3   |
| All-Red Time (s)        | 2.5   | 2.5    | 2.5    | 2.5   |     | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0    | 0.0    | 0.0   |     | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.2    | 6.2    | 6.2   |     | 6.1   | 6.1   |
| Lead/Lag                |       |        |        |       |     |       |       |
| Lead-Lag Optimize?      |       |        |        |       |     |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0    | 3.0    | 3.0   |     | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max  | C-Max  | C-Max |     | None  | None  |
| Walk Time (s)           |       |        |        | 7.0   |     | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |        |        | 18.0  |     | 21.0  | 21.0  |
| Pedestrian Calls (#/hr) |       |        |        | 17    |     | 15    | 15    |
| Act Effct Green (s)     |       | 90.1   | 90.1   | 90.1  |     | 17.6  | 17.6  |
| Actuated g/C Ratio      |       | 0.75   | 0.75   | 0.75  |     | 0.15  | 0.15  |
| v/c Ratio               |       | 0.83   | 0.52   | 0.73  |     | 0.39  | 0.40  |
| Control Delay           |       | 66.7   | 15.8   | 12.0  |     | 44.4  | 34.6  |
| Queue Delay             |       | 0.0    | 3.7    | 0.0   |     | 0.0   | 0.0   |
| Total Delay             |       | 66.7   | 19.5   | 12.0  |     | 44.4  | 34.6  |
| LOS                     |       | E      | B      | B     |     | D     | C     |
| Approach Delay          |       |        | 22.1   | 12.0  |     | 39.6  |       |
| Approach LOS            |       |        | C      | B     |     | D     |       |
| Queue Length 50th (m)   |       | 14.6   | 108.0  | 79.6  |     | 21.0  | 16.1  |
| Queue Length 95th (m)   |       | m#25.6 | m171.4 | 178.9 |     | m28.8 | m23.4 |
| Internal Link Dist (m)  |       |        | 133.6  | 290.8 |     | 377.6 |       |
| Turn Bay Length (m)     |       | 35.0   |        |       |     | 30.0  |       |
| Base Capacity (vph)     |       | 99     | 2655   | 2641  |     | 405   | 372   |
| Starvation Cap Reductn  |       | 0      | 1147   | 0     |     | 0     | 0     |
| Spillback Cap Reductn   |       | 0      | 0      | 0     |     | 0     | 0     |
| Storage Cap Reductn     |       | 0      | 0      | 0     |     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.83   | 0.92   | 0.73  |     | 0.24  | 0.26  |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 10 (8%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 17.7

Intersection LOS: B

Intersection Capacity Utilization 94.4%

ICU Level of Service F

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Hazeldean & Edgewater



0.4 split, 100% split

Dynamic Traffic Report

6: Terry Fox & Charlie Rogers/Edgewater  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |   |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                   | 1482                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1835                                                                                |
| Future Volume (vph)        | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                   | 1482                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1835                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.98                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                     | 0.994                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1669                                                                              | 1554                                                                              | 0                                                                                 | 1768                                                                              | 1560                                                                              | 0                                                                                 | 1768                                                                                | 3478                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3537                                                                                |
| Flt Permitted              | 0.397                                                                             |                                                                                   |                                                                                   | 0.752                                                                             |                                                                                   |                                                                                   | 0.083                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.082                                                                               |                                                                                     |
| Satd. Flow (perm)          | 695                                                                               | 1554                                                                              | 0                                                                                 | 1391                                                                              | 1560                                                                              | 0                                                                                 | 154                                                                                 | 3478                                                                                | 0                                                                                   | 0                                                                                   | 150                                                                                 | 3537                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 123                                                                               |                                                                                   |                                                                                   | 113                                                                               |                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                     | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                     | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 7%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 3%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                   | 1482                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1835                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 8                                                                                 | 0                                                                                 | 41                                                                                | 189                                                                               | 0                                                                                 | 2                                                                                   | 1545                                                                                | 0                                                                                   | 0                                                                                   | 165                                                                                 | 1835                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 29    |
| Future Volume (vph)        | 29    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1551  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1504  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 92    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 3%    |
| Adj. Flow (vph)            | 29    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 29    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |



| Lane Group              | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBU   | SBL   | SBT    |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|--------|
| Minimum Initial (s)     | 10.0  | 10.0  |     | 10.0  | 10.0  |     | 5.0   | 10.0  |     | 5.0   | 5.0   | 10.0   |
| Minimum Split (s)       | 36.5  | 36.5  |     | 36.5  | 36.5  |     | 11.6  | 34.5  |     | 11.6  | 11.6  | 34.5   |
| Total Split (s)         | 37.0  | 37.0  |     | 37.0  | 37.0  |     | 14.0  | 69.0  |     | 14.0  | 14.0  | 69.0   |
| Total Split (%)         | 30.8% | 30.8% |     | 30.8% | 30.8% |     | 11.7% | 57.5% |     | 11.7% | 11.7% | 57.5%  |
| Maximum Green (s)       | 30.5  | 30.5  |     | 30.5  | 30.5  |     | 7.4   | 62.5  |     | 7.4   | 7.4   | 62.5   |
| Yellow Time (s)         | 3.3   | 3.3   |     | 3.3   | 3.3   |     | 4.2   | 4.2   |     | 4.2   | 4.2   | 4.2    |
| All-Red Time (s)        | 3.2   | 3.2   |     | 3.2   | 3.2   |     | 2.4   | 2.3   |     | 2.4   | 2.4   | 2.3    |
| Lost Time Adjust (s)    | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |       | 0.0   | 0.0    |
| Total Lost Time (s)     | 6.5   | 6.5   |     | 6.5   | 6.5   |     | 6.6   | 6.5   |     |       | 6.6   | 6.5    |
| Lead/Lag                |       |       |     |       |       |     | Lead  | Lag   |     | Lead  | Lead  | Lag    |
| Lead-Lag Optimize?      |       |       |     |       |       |     |       |       |     |       |       |        |
| Vehicle Extension (s)   | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0    |
| Recall Mode             | None  | None  |     | None  | None  |     | None  | C-Max |     | None  | None  | C-Max  |
| Walk Time (s)           | 7.0   | 7.0   |     | 7.0   | 7.0   |     |       | 7.0   |     |       |       | 7.0    |
| Flash Dont Walk (s)     | 23.0  | 23.0  |     | 23.0  | 23.0  |     |       | 21.0  |     |       |       | 21.0   |
| Pedestrian Calls (#/hr) | 5     | 5     |     | 5     | 5     |     |       | 5     |     |       |       | 5      |
| Act Effct Green (s)     | 15.3  | 15.3  |     | 15.3  | 15.3  |     | 77.4  | 72.0  |     |       | 90.7  | 89.2   |
| Actuated g/C Ratio      | 0.13  | 0.13  |     | 0.13  | 0.13  |     | 0.64  | 0.60  |     |       | 0.76  | 0.74   |
| v/c Ratio               | 0.17  | 0.03  |     | 0.23  | 0.64  |     | 0.01  | 0.74  |     |       | 0.58  | 0.70   |
| Control Delay           | 46.7  | 0.1   |     | 39.9  | 24.7  |     | 5.5   | 11.4  |     |       | 23.8  | 12.9   |
| Queue Delay             | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |       | 0.0   | 0.0    |
| Total Delay             | 46.7  | 0.1   |     | 39.9  | 24.7  |     | 5.5   | 11.4  |     |       | 23.8  | 12.9   |
| LOS                     | D     | A     |     | D     | C     |     | A     | B     |     |       | C     | B      |
| Approach Delay          |       | 30.5  |     |       | 27.4  |     |       | 11.4  |     |       |       | 13.6   |
| Approach LOS            |       | C     |     |       | C     |     |       | B     |     |       |       | B      |
| Queue Length 50th (m)   | 3.0   | 0.0   |     | 8.7   | 18.4  |     | 0.0   | 53.1  |     |       | 9.2   | 73.1   |
| Queue Length 95th (m)   | 7.9   | 0.0   |     | m11.3 | m26.3 |     | m0.2  | 44.0  |     |       | #51.8 | #248.3 |
| Internal Link Dist (m)  |       | 193.1 |     |       | 258.1 |     |       | 229.3 |     |       |       | 336.0  |
| Turn Bay Length (m)     |       |       |     | 65.0  |       |     |       |       |     |       | 55.0  |        |
| Base Capacity (vph)     | 176   | 486   |     | 353   | 480   |     | 201   | 2087  |     |       | 286   | 2629   |
| Starvation Cap Reductn  | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     |       | 0     | 0      |
| Spillback Cap Reductn   | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     |       | 0     | 0      |
| Storage Cap Reductn     | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     |       | 0     | 0      |
| Reduced v/c Ratio       | 0.09  | 0.02  |     | 0.12  | 0.39  |     | 0.01  | 0.74  |     |       | 0.58  | 0.70   |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 46 (38%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 13.6

Intersection LOS: B

Intersection Capacity Utilization 89.0%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 69.0  |
| Total Split (%)         | 57.5% |
| Maximum Green (s)       | 62.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                | Lag   |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 89.2  |
| Actuated g/C Ratio      | 0.74  |
| v/c Ratio               | 0.03  |
| Control Delay           | 0.0   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.0   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.0   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1141  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.03  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBU                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |  |                                                                                     |                                                                                     |  |
| Traffic Volume (vph)       | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1353                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Future Volume (vph)        | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1353                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 35.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 |                                                                                    | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (m)           | 25.0                                                                              |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                    | 10.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                               | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor            | 0.99                                                                              | 0.98                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                    |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                    |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 1768                                                                              | 1552                                                                              | 0                                                                                 | 1488                                                                              | 1552                                                                              | 0                                                                                 | 0                                                                                  | 1768                                                                                | 3457                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                |
| Flt Permitted              | 0.756                                                                             |                                                                                   |                                                                                   | 0.740                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.104                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.172                                                                               |
| Satd. Flow (perm)          | 1398                                                                              | 1552                                                                              | 0                                                                                 | 1152                                                                              | 1552                                                                              | 0                                                                                 | 0                                                                                  | 194                                                                                 | 3457                                                                                | 0                                                                                   | 0                                                                                   | 320                                                                                 |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 116                                                                               |                                                                                   |                                                                                   | 137                                                                               |                                                                                   |                                                                                    |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   | 207.5                                                                             |                                                                                   |                                                                                   | 88.7                                                                              |                                                                                   |                                                                                    |                                                                                     | 316.2                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   | 14.9                                                                              |                                                                                   |                                                                                   | 10.6                                                                              |                                                                                   |                                                                                    |                                                                                     | 16.3                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 20%                                                                               | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 3%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1353                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 26                                                                                | 0                                                                                 | 5                                                                                 | 3                                                                                 | 0                                                                                 | 0                                                                                  | 39                                                                                  | 1377                                                                                | 0                                                                                   | 0                                                                                   | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                               | Left                                                                                | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 12.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                 | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙    |
|----------------------------|-------|------|
| Lane Group                 | SBT   | SBR  |
| Lane Configurations        | ↑↑    |      |
| Traffic Volume (vph)       | 1660  | 1    |
| Future Volume (vph)        | 1660  | 1    |
| Ideal Flow (vphpl)         | 1800  | 1800 |
| Storage Length (m)         |       | 0.0  |
| Storage Lanes              |       | 0    |
| Taper Length (m)           |       |      |
| Lane Util. Factor          | 0.95  | 0.95 |
| Ped Bike Factor            | 1.00  |      |
| Frt                        |       |      |
| Flt Protected              |       |      |
| Satd. Flow (prot)          | 3537  | 0    |
| Flt Permitted              |       |      |
| Satd. Flow (perm)          | 3537  | 0    |
| Right Turn on Red          |       | Yes  |
| Satd. Flow (RTOR)          |       |      |
| Link Speed (k/h)           | 70    |      |
| Link Distance (m)          | 253.3 |      |
| Travel Time (s)            | 13.0  |      |
| Confl. Peds. (#/hr)        |       | 5    |
| Peak Hour Factor           | 1.00  | 1.00 |
| Heavy Vehicles (%)         | 1%    | 1%   |
| Adj. Flow (vph)            | 1660  | 1    |
| Shared Lane Traffic (%)    |       |      |
| Lane Group Flow (vph)      | 1661  | 0    |
| Enter Blocked Intersection | No    | No   |
| Lane Alignment             | Left  | R NA |
| Median Width(m)            | 12.0  |      |
| Link Offset(m)             | 0.0   |      |
| Crosswalk Width(m)         | 5.0   |      |
| Two way Left Turn Lane     |       |      |
| Headway Factor             | 1.01  | 1.01 |
| Turning Speed (k/h)        |       | 14   |
| Number of Detectors        | 2     |      |
| Detector Template          | Thru  |      |
| Leading Detector (m)       | 10.0  |      |
| Trailing Detector (m)      | 0.0   |      |
| Detector 1 Position(m)     | 0.0   |      |
| Detector 1 Size(m)         | 0.6   |      |
| Detector 1 Type            | CI+Ex |      |
| Detector 1 Channel         |       |      |
| Detector 1 Extend (s)      | 0.0   |      |
| Detector 1 Queue (s)       | 0.0   |      |
| Detector 1 Delay (s)       | 0.0   |      |
| Detector 2 Position(m)     | 9.4   |      |
| Detector 2 Size(m)         | 0.6   |      |
| Detector 2 Type            | CI+Ex |      |
| Detector 2 Channel         |       |      |
| Detector 2 Extend (s)      | 0.0   |      |
| Turn Type                  | NA    |      |
| Protected Phases           | 6     |      |
| Permitted Phases           |       |      |
| Detector Phase             | 6     |      |
| Switch Phase               |       |      |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBU                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 5.0                                                                                | 5.0                                                                                 | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.2                                                                              | 32.2                                                                              |                                                                                   | 11.5                                                                               | 11.5                                                                                | 32.5                                                                                |                                                                                     | 11.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                | 72.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                |
| Total Split (%)         | 27.5%                                                                             | 27.5%                                                                             |                                                                                   | 27.5%                                                                             | 27.5%                                                                             |                                                                                   | 12.5%                                                                              | 12.5%                                                                               | 60.0%                                                                               |                                                                                     | 12.5%                                                                               | 12.5%                                                                               |
| Maximum Green (s)       | 26.8                                                                              | 26.8                                                                              |                                                                                   | 26.8                                                                              | 26.8                                                                              |                                                                                   | 8.5                                                                                | 8.5                                                                                 | 65.5                                                                                |                                                                                     | 8.5                                                                                 | 8.5                                                                                 |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Total Lost Time (s)     | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.2                                                                               | 6.2                                                                               |                                                                                   |                                                                                    | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |                                                                                     | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lead                                                                                | Lag                                                                                 |                                                                                     | Lead                                                                                | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | None                                                                                | C-Max                                                                               |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 7.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Flash Dont Walk (s)     | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                              | 19.0                                                                              |                                                                                   |                                                                                    |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                    |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Act Effct Green (s)     | 13.2                                                                              | 13.2                                                                              |                                                                                   | 13.2                                                                              | 13.2                                                                              |                                                                                   |                                                                                    | 99.6                                                                                | 100.7                                                                               |                                                                                     |                                                                                     | 96.1                                                                                |
| Actuated g/C Ratio      | 0.11                                                                              | 0.11                                                                              |                                                                                   | 0.11                                                                              | 0.11                                                                              |                                                                                   |                                                                                    | 0.83                                                                                | 0.84                                                                                |                                                                                     |                                                                                     | 0.80                                                                                |
| v/c Ratio               | 0.02                                                                              | 0.10                                                                              |                                                                                   | 0.04                                                                              | 0.01                                                                              |                                                                                   |                                                                                    | 0.16                                                                                | 0.47                                                                                |                                                                                     |                                                                                     | 0.01                                                                                |
| Control Delay           | 43.0                                                                              | 0.7                                                                               |                                                                                   | 43.8                                                                              | 0.0                                                                               |                                                                                   |                                                                                    | 2.6                                                                                 | 2.4                                                                                 |                                                                                     |                                                                                     | 5.2                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Total Delay             | 43.0                                                                              | 0.7                                                                               |                                                                                   | 43.8                                                                              | 0.0                                                                               |                                                                                   |                                                                                    | 2.6                                                                                 | 2.4                                                                                 |                                                                                     |                                                                                     | 5.2                                                                                 |
| LOS                     | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | A                                                                                 |                                                                                   |                                                                                    | A                                                                                   | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |
| Approach Delay          |                                                                                   | 5.1                                                                               |                                                                                   |                                                                                   | 27.4                                                                              |                                                                                   |                                                                                    |                                                                                     | 2.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 50th (m)   | 0.6                                                                               | 0.0                                                                               |                                                                                   | 1.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 1.0                                                                                 | 20.8                                                                                |                                                                                     |                                                                                     | 0.1                                                                                 |
| Queue Length 95th (m)   | 2.9                                                                               | 0.0                                                                               |                                                                                   | 4.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | m1.6                                                                                | m27.5                                                                               |                                                                                     |                                                                                     | m0.4                                                                                |
| Internal Link Dist (m)  |                                                                                   | 183.5                                                                             |                                                                                   |                                                                                   | 64.7                                                                              |                                                                                   |                                                                                    |                                                                                     | 292.2                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Turn Bay Length (m)     | 35.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |
| Base Capacity (vph)     | 312                                                                               | 436                                                                               |                                                                                   | 257                                                                               | 453                                                                               |                                                                                   |                                                                                    | 272                                                                                 | 2902                                                                                |                                                                                     |                                                                                     | 363                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       | 0.01                                                                              | 0.06                                                                              |                                                                                   | 0.02                                                                              | 0.01                                                                              |                                                                                   |                                                                                    | 0.14                                                                                | 0.47                                                                                |                                                                                     |                                                                                     | 0.01                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 40 (33%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 4.3

Intersection LOS: A

Intersection Capacity Utilization 69.4%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Terry Fox & Tony Graham Rec





| Lane Group              | SBT   | SBR |
|-------------------------|-------|-----|
| Minimum Initial (s)     | 10.0  |     |
| Minimum Split (s)       | 32.5  |     |
| Total Split (s)         | 72.0  |     |
| Total Split (%)         | 60.0% |     |
| Maximum Green (s)       | 65.5  |     |
| Yellow Time (s)         | 4.2   |     |
| All-Red Time (s)        | 2.3   |     |
| Lost Time Adjust (s)    | 0.0   |     |
| Total Lost Time (s)     | 6.5   |     |
| Lead/Lag                | Lag   |     |
| Lead-Lag Optimize?      |       |     |
| Vehicle Extension (s)   | 3.0   |     |
| Recall Mode             | C-Max |     |
| Walk Time (s)           | 7.0   |     |
| Flash Dont Walk (s)     | 19.0  |     |
| Pedestrian Calls (#/hr) | 5     |     |
| Act Effct Green (s)     | 95.4  |     |
| Actuated g/C Ratio      | 0.80  |     |
| v/c Ratio               | 0.59  |     |
| Control Delay           | 5.9   |     |
| Queue Delay             | 0.0   |     |
| Total Delay             | 5.9   |     |
| LOS                     | A     |     |
| Approach Delay          | 5.9   |     |
| Approach LOS            | A     |     |
| Queue Length 50th (m)   | 31.2  |     |
| Queue Length 95th (m)   | 59.3  |     |
| Internal Link Dist (m)  | 229.3 |     |
| Turn Bay Length (m)     |       |     |
| Base Capacity (vph)     | 2810  |     |
| Starvation Cap Reductn  | 47    |     |
| Spillback Cap Reductn   | 0     |     |
| Storage Cap Reductn     | 0     |     |
| Reduced v/c Ratio       | 0.60  |     |
| Intersection Summary    |       |     |

8: Terry Fox & Sobey's  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 1111                                                                                | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1521                                                                                |
| Future Volume (vph)        | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 1111                                                                                | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1521                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 10.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 30.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.91                                                                                | 0.91                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.917                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.990                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.992                                                                               |
| Flt Protected              |                                                                                   | 0.984                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1658                                                                              | 0                                                                                 | 0                                                                                 | 1776                                                                              | 1582                                                                              | 1768                                                                               | 5020                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3499                                                                                |
| Flt Permitted              |                                                                                   | 0.864                                                                             |                                                                                   |                                                                                   | 0.602                                                                             |                                                                                   | 0.115                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.214                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1453                                                                              | 0                                                                                 | 0                                                                                 | 1114                                                                              | 1552                                                                              | 214                                                                                | 5020                                                                                | 0                                                                                   | 0                                                                                   | 397                                                                                 | 3499                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 103                                                                               |                                                                                    | 18                                                                                  |                                                                                     |                                                                                     |                                                                                     | 9                                                                                   |
| Link Speed (k/h)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 132.0                                                                             |                                                                                   |                                                                                   | 152.6                                                                             |                                                                                   |                                                                                    | 140.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 142.7                                                                               |
| Travel Time (s)            |                                                                                   | 15.8                                                                              |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                    | 7.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.3                                                                                 |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 10                                                                                 |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 1111                                                                                | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1521                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 117                                                                               | 0                                                                                 | 0                                                                                 | 80                                                                                | 103                                                                               | 26                                                                                 | 1187                                                                                | 0                                                                                   | 0                                                                                   | 117                                                                                 | 1603                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |

|                            |      |    |
|----------------------------|------|----|
| Lane Group                 | SBR  | Ø9 |
| Lane Configurations        |      |    |
| Traffic Volume (vph)       | 82   |    |
| Future Volume (vph)        | 82   |    |
| Ideal Flow (vphpl)         | 1800 |    |
| Storage Length (m)         | 0.0  |    |
| Storage Lanes              | 0    |    |
| Taper Length (m)           |      |    |
| Lane Util. Factor          | 0.95 |    |
| Ped Bike Factor            |      |    |
| Frt                        |      |    |
| Flt Protected              |      |    |
| Satd. Flow (prot)          | 0    |    |
| Flt Permitted              |      |    |
| Satd. Flow (perm)          | 0    |    |
| Right Turn on Red          | Yes  |    |
| Satd. Flow (RTOR)          |      |    |
| Link Speed (k/h)           |      |    |
| Link Distance (m)          |      |    |
| Travel Time (s)            |      |    |
| Confl. Peds. (#/hr)        | 10   |    |
| Confl. Bikes (#/hr)        | 1    |    |
| Peak Hour Factor           | 1.00 |    |
| Heavy Vehicles (%)         | 1%   |    |
| Adj. Flow (vph)            | 82   |    |
| Shared Lane Traffic (%)    |      |    |
| Lane Group Flow (vph)      | 0    |    |
| Enter Blocked Intersection | No   |    |
| Lane Alignment             | R NA |    |
| Median Width(m)            |      |    |
| Link Offset(m)             |      |    |
| Crosswalk Width(m)         |      |    |
| Two way Left Turn Lane     |      |    |
| Headway Factor             | 1.01 |    |
| Turning Speed (k/h)        | 14   |    |
| Number of Detectors        |      |    |
| Detector Template          |      |    |
| Leading Detector (m)       |      |    |
| Trailing Detector (m)      |      |    |
| Detector 1 Position(m)     |      |    |
| Detector 1 Size(m)         |      |    |
| Detector 1 Type            |      |    |
| Detector 1 Channel         |      |    |
| Detector 1 Extend (s)      |      |    |
| Detector 1 Queue (s)       |      |    |
| Detector 1 Delay (s)       |      |    |
| Detector 2 Position(m)     |      |    |
| Detector 2 Size(m)         |      |    |
| Detector 2 Type            |      |    |
| Detector 2 Channel         |      |    |
| Detector 2 Extend (s)      |      |    |
| Turn Type                  |      |    |
| Protected Phases           | 9    |    |
| Permitted Phases           |      |    |
| Detector Phase             |      |    |



8: Terry Fox & Sobey's  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 26.0                                                                               | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                | 26.0                                                                                |
| Total Split (s)         | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 84.0                                                                               | 84.0                                                                                |                                                                                     | 84.0                                                                                | 84.0                                                                                | 84.0                                                                                |
| Total Split (%)         | 25.8%                                                                             | 25.8%                                                                             |                                                                                   | 25.8%                                                                             | 25.8%                                                                             | 25.8%                                                                             | 70.0%                                                                              | 70.0%                                                                               |                                                                                     | 70.0%                                                                               | 70.0%                                                                               | 70.0%                                                                               |
| Maximum Green (s)       | 24.0                                                                              | 24.0                                                                              |                                                                                   | 24.0                                                                              | 24.0                                                                              | 24.0                                                                              | 78.0                                                                               | 78.0                                                                                |                                                                                     | 78.0                                                                                | 78.0                                                                                | 78.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 1.8                                                                                | 1.8                                                                                 |                                                                                     | 1.8                                                                                 | 1.8                                                                                 | 1.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               | 6.0                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 6.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 17.0                                                                              | 17.0                                                                              |                                                                                   | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              | 13.0                                                                               | 13.0                                                                                |                                                                                     | 13.0                                                                                | 13.0                                                                                | 13.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  | 10                                                                                  |
| Act Effct Green (s)     |                                                                                   | 14.8                                                                              |                                                                                   |                                                                                   | 14.8                                                                              | 14.8                                                                              | 87.2                                                                               | 87.2                                                                                |                                                                                     |                                                                                     | 87.2                                                                                | 87.2                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.12                                                                              | 0.12                                                                              | 0.73                                                                               | 0.73                                                                                |                                                                                     |                                                                                     | 0.73                                                                                | 0.73                                                                                |
| v/c Ratio               |                                                                                   | 0.50                                                                              |                                                                                   |                                                                                   | 0.58                                                                              | 0.37                                                                              | 0.17                                                                               | 0.33                                                                                |                                                                                     |                                                                                     | 0.41                                                                                | 0.63                                                                                |
| Control Delay           |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 65.2                                                                              | 11.8                                                                              | 7.8                                                                                | 6.1                                                                                 |                                                                                     |                                                                                     | 4.5                                                                                 | 4.4                                                                                 |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.4                                                                                 |
| Total Delay             |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 65.2                                                                              | 11.8                                                                              | 7.8                                                                                | 6.1                                                                                 |                                                                                     |                                                                                     | 4.5                                                                                 | 4.8                                                                                 |
| LOS                     |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 | B                                                                                 | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 35.1                                                                              |                                                                                   |                                                                                    | 6.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 4.8                                                                                 |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   | 16.9                                                                              | 0.0                                                                               | 2.0                                                                                | 38.2                                                                                |                                                                                     |                                                                                     | 1.9                                                                                 | 16.0                                                                                |
| Queue Length 95th (m)   |                                                                                   | 26.0                                                                              |                                                                                   |                                                                                   | 29.2                                                                              | 13.2                                                                              | m5.9                                                                               | 40.3                                                                                |                                                                                     |                                                                                     | m3.5                                                                                | m22.1                                                                               |
| Internal Link Dist (m)  |                                                                                   | 108.0                                                                             |                                                                                   |                                                                                   | 128.6                                                                             |                                                                                   |                                                                                    | 116.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 118.7                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 338                                                                               |                                                                                   |                                                                                   | 222                                                                               | 392                                                                               | 155                                                                                | 3651                                                                                |                                                                                     |                                                                                     | 288                                                                                 | 2543                                                                                |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 417                                                                                 |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.35                                                                              |                                                                                   |                                                                                   | 0.36                                                                              | 0.26                                                                              | 0.17                                                                               | 0.33                                                                                |                                                                                     |                                                                                     | 0.41                                                                                | 0.75                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 22 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 8.0

Intersection LOS: A

Intersection Capacity Utilization 86.5%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Terry Fox & Sobey's



|                         |     |     |
|-------------------------|-----|-----|
| Lane Group              | SBR | Ø9  |
| Switch Phase            |     |     |
| Minimum Initial (s)     |     | 3.0 |
| Minimum Split (s)       |     | 5.0 |
| Total Split (s)         |     | 5.0 |
| Total Split (%)         |     | 4%  |
| Maximum Green (s)       |     | 3.0 |
| Yellow Time (s)         |     | 2.0 |
| All-Red Time (s)        |     | 0.0 |
| Lost Time Adjust (s)    |     |     |
| Total Lost Time (s)     |     |     |
| Lead/Lag                |     |     |
| Lead-Lag Optimize?      |     |     |
| Vehicle Extension (s)   |     | 3.0 |
| Recall Mode             |     | Max |
| Walk Time (s)           |     |     |
| Flash Dont Walk (s)     |     |     |
| Pedestrian Calls (#/hr) |     |     |
| Act Effct Green (s)     |     |     |
| Actuated g/C Ratio      |     |     |
| v/c Ratio               |     |     |
| Control Delay           |     |     |
| Queue Delay             |     |     |
| Total Delay             |     |     |
| LOS                     |     |     |
| Approach Delay          |     |     |
| Approach LOS            |     |     |
| Queue Length 50th (m)   |     |     |
| Queue Length 95th (m)   |     |     |
| Internal Link Dist (m)  |     |     |
| Turn Bay Length (m)     |     |     |
| Base Capacity (vph)     |     |     |
| Starvation Cap Reductn  |     |     |
| Spillback Cap Reductn   |     |     |
| Storage Cap Reductn     |     |     |
| Reduced v/c Ratio       |     |     |
| Intersection Summary    |     |     |

9: Terry Fox & Halkirk/Winchester  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                 | 1103                                                                                | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1479                                                                                |
| Future Volume (vph)        | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                 | 1103                                                                                | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1479                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 15.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 65.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 120.0                                                                               |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 20.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 0.99                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     | 0.99                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.925                                                                             |                                                                                   |                                                                                   | 0.872                                                                             |                                                                                   |                                                                                    | 0.996                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1701                                                                              | 1701                                                                              | 0                                                                                 | 1768                                                                              | 1598                                                                              | 0                                                                                 | 1768                                                                               | 3516                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3537                                                                                |
| Flt Permitted              | 0.629                                                                             |                                                                                   |                                                                                   | 0.748                                                                             |                                                                                   |                                                                                   | 0.151                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.231                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1120                                                                              | 1701                                                                              | 0                                                                                 | 1376                                                                              | 1598                                                                              | 0                                                                                 | 281                                                                                | 3516                                                                                | 0                                                                                   | 0                                                                                   | 428                                                                                 | 3537                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 7                                                                                 |                                                                                   |                                                                                   | 95                                                                                |                                                                                   |                                                                                    | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 40                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 65.4                                                                              |                                                                                   |                                                                                   | 381.2                                                                             |                                                                                   |                                                                                    | 479.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 200.7                                                                               |
| Travel Time (s)            |                                                                                   | 4.7                                                                               |                                                                                   |                                                                                   | 34.3                                                                              |                                                                                   |                                                                                    | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     | 10.3                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                 | 10                                                                                 |                                                                                     | 14                                                                                  |                                                                                     | 14                                                                                  |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 5%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                 | 1103                                                                                | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1479                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 23                                                                                | 14                                                                                | 0                                                                                 | 48                                                                                | 114                                                                               | 0                                                                                 | 12                                                                                 | 1137                                                                                | 0                                                                                   | 0                                                                                   | 141                                                                                 | 1479                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        |       |
| Traffic Volume (vph)       | 44    |
| Future Volume (vph)        | 44    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 55.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.95  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1508  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 41    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 10    |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 44    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 44    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

9: Terry Fox & Halkirk/Winchester  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 28.3                                                                               | 28.3                                                                                |                                                                                     | 28.3                                                                                | 28.3                                                                                | 28.3                                                                                |
| Total Split (s)         | 38.0                                                                              | 38.0                                                                              |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 82.0                                                                               | 82.0                                                                                |                                                                                     | 82.0                                                                                | 82.0                                                                                | 82.0                                                                                |
| Total Split (%)         | 31.7%                                                                             | 31.7%                                                                             |                                                                                   | 31.7%                                                                             | 31.7%                                                                             |                                                                                   | 68.3%                                                                              | 68.3%                                                                               |                                                                                     | 68.3%                                                                               | 68.3%                                                                               | 68.3%                                                                               |
| Maximum Green (s)       | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 75.7                                                                               | 75.7                                                                                |                                                                                     | 75.7                                                                                | 75.7                                                                                | 75.7                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.1                                                                                | 2.1                                                                                 |                                                                                     | 2.1                                                                                 | 2.1                                                                                 | 2.1                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.3                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 15.0                                                                                |
| Pedestrian Calls (#/hr) | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 14                                                                                 | 14                                                                                  |                                                                                     | 10                                                                                  | 10                                                                                  | 10                                                                                  |
| Act Effct Green (s)     | 14.3                                                                              | 14.3                                                                              |                                                                                   | 14.3                                                                              | 14.3                                                                              |                                                                                   | 93.4                                                                               | 93.4                                                                                |                                                                                     |                                                                                     | 93.4                                                                                | 93.4                                                                                |
| Actuated g/C Ratio      | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.78                                                                               | 0.78                                                                                |                                                                                     |                                                                                     | 0.78                                                                                | 0.78                                                                                |
| v/c Ratio               | 0.17                                                                              | 0.07                                                                              |                                                                                   | 0.29                                                                              | 0.42                                                                              |                                                                                   | 0.06                                                                               | 0.42                                                                                |                                                                                     |                                                                                     | 0.42                                                                                | 0.54                                                                                |
| Control Delay           | 46.9                                                                              | 29.7                                                                              |                                                                                   | 50.1                                                                              | 16.7                                                                              |                                                                                   | 5.9                                                                                | 5.8                                                                                 |                                                                                     |                                                                                     | 17.4                                                                                | 14.6                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 46.9                                                                              | 29.7                                                                              |                                                                                   | 50.1                                                                              | 16.7                                                                              |                                                                                   | 5.9                                                                                | 5.8                                                                                 |                                                                                     |                                                                                     | 17.4                                                                                | 14.6                                                                                |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | B                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 40.4                                                                              |                                                                                   |                                                                                   | 26.6                                                                              |                                                                                   |                                                                                    | 5.8                                                                                 |                                                                                     |                                                                                     |                                                                                     | 14.6                                                                                |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 4.8                                                                               | 1.4                                                                               |                                                                                   | 10.1                                                                              | 3.9                                                                               |                                                                                   | 0.4                                                                                | 28.0                                                                                |                                                                                     |                                                                                     | 18.6                                                                                | 104.7                                                                               |
| Queue Length 95th (m)   | 10.2                                                                              | 6.0                                                                               |                                                                                   | 17.4                                                                              | 16.3                                                                              |                                                                                   | 3.2                                                                                | 76.0                                                                                |                                                                                     |                                                                                     | 35.1                                                                                | 135.3                                                                               |
| Internal Link Dist (m)  |                                                                                   | 41.4                                                                              |                                                                                   |                                                                                   | 357.2                                                                             |                                                                                   |                                                                                    | 455.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 176.7                                                                               |
| Turn Bay Length (m)     | 15.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 120.0                                                                               |                                                                                     |
| Base Capacity (vph)     | 298                                                                               | 458                                                                               |                                                                                   | 366                                                                               | 495                                                                               |                                                                                   | 218                                                                                | 2738                                                                                |                                                                                     |                                                                                     | 333                                                                                 | 2754                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.08                                                                              | 0.03                                                                              |                                                                                   | 0.13                                                                              | 0.23                                                                              |                                                                                   | 0.06                                                                               | 0.42                                                                                |                                                                                     |                                                                                     | 0.42                                                                                | 0.54                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 115 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 12.2

Intersection LOS: B

Intersection Capacity Utilization 80.0%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Terry Fox & Halkirk/Winchester



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 28.3  |
| Total Split (s)         | 82.0  |
| Total Split (%)         | 68.3% |
| Maximum Green (s)       | 75.7  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.1   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.3   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 15.0  |
| Pedestrian Calls (#/hr) | 10    |
| Act Effct Green (s)     | 93.4  |
| Actuated g/C Ratio      | 0.78  |
| v/c Ratio               | 0.04  |
| Control Delay           | 5.6   |
| Queue Delay             | 0.0   |
| Total Delay             | 5.6   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 1.5   |
| Queue Length 95th (m)   | m6.0  |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 55.0  |
| Base Capacity (vph)     | 1183  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.04  |
| Intersection Summary    |       |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Background Traffic (optimized timing)

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 286                                                                               | 984                                                                               | 199                                                                               | 5                                                                                 | 154                                                                               | 459                                                                                | 211                                                                                 | 207                                                                                 | 888                                                                                 | 307                                                                                 | 209                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 286                                                                               | 984                                                                               | 199                                                                               | 5                                                                                 | 154                                                                               | 459                                                                                | 211                                                                                 | 207                                                                                 | 888                                                                                 | 307                                                                                 | 209                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     | 75.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.98                                                                              |                                                                                   | 1.00                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3213                                                                              | 3468                                                                              | 1508                                                                              | 0                                                                                 | 3398                                                                              | 3435                                                                               | 1537                                                                                | 3300                                                                                | 3468                                                                                | 1567                                                                                | 3179                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3203                                                                              | 3468                                                                              | 1479                                                                              | 0                                                                                 | 3393                                                                              | 3435                                                                               | 1504                                                                                | 3284                                                                                | 3468                                                                                | 1538                                                                                | 3170                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 199                                                                               |                                                                                   |                                                                                   |                                                                                    | 228                                                                                 |                                                                                     |                                                                                     | 228                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                    | 4                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 8%                                                                                | 3%                                                                                | 6%                                                                                | 1%                                                                                | 2%                                                                                | 4%                                                                                 | 4%                                                                                  | 5%                                                                                  | 3%                                                                                  | 2%                                                                                  | 9%                                                                                  |
| Adj. Flow (vph)            | 7                                                                                 | 286                                                                               | 984                                                                               | 199                                                                               | 5                                                                                 | 154                                                                               | 459                                                                                | 211                                                                                 | 207                                                                                 | 888                                                                                 | 307                                                                                 | 209                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 293                                                                               | 984                                                                               | 199                                                                               | 0                                                                                 | 159                                                                               | 459                                                                                | 211                                                                                 | 207                                                                                 | 888                                                                                 | 307                                                                                 | 209                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Background Traffic (optimized timing)

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 510   | 362   |
| Future Volume (vph)        | 510   | 362   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 200.0 |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3402  | 1508  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3402  | 1481  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 235   |
| Link Speed (k/h)           | 70    |       |
| Link Distance (m)          | 316.2 |       |
| Travel Time (s)            | 16.3  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Confl. Bikes (#/hr)        |       |       |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 5%    | 6%    |
| Adj. Flow (vph)            | 510   | 362   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 510   | 362   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | Right |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 6     |       |
| Permitted Phases           |       | 6     |
| Detector Phase             | 6     | 6     |



4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Background Traffic (optimized timing)

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                               | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                               | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 21.0                                                                              | 21.0                                                                              | 43.0                                                                              | 43.0                                                                              | 14.0                                                                              | 14.0                                                                              | 36.0                                                                               | 36.0                                                                                | 17.0                                                                                | 36.0                                                                                | 36.0                                                                                | 17.0                                                                                |
| Total Split (%)         | 19.1%                                                                             | 19.1%                                                                             | 39.1%                                                                             | 39.1%                                                                             | 12.7%                                                                             | 12.7%                                                                             | 32.7%                                                                              | 32.7%                                                                               | 15.5%                                                                               | 32.7%                                                                               | 32.7%                                                                               | 15.5%                                                                               |
| Maximum Green (s)       | 14.5                                                                              | 14.5                                                                              | 36.5                                                                              | 36.5                                                                              | 7.5                                                                               | 7.5                                                                               | 29.5                                                                               | 29.5                                                                                | 10.5                                                                                | 29.5                                                                                | 29.5                                                                                | 10.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 13.6                                                                              | 35.0                                                                              | 35.0                                                                              |                                                                                   | 7.5                                                                               | 28.9                                                                               | 28.9                                                                                | 10.2                                                                                | 31.2                                                                                | 31.2                                                                                | 10.3                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              | 0.32                                                                              | 0.32                                                                              |                                                                                   | 0.07                                                                              | 0.26                                                                               | 0.26                                                                                | 0.09                                                                                | 0.28                                                                                | 0.28                                                                                | 0.09                                                                                |
| v/c Ratio               |                                                                                   | 0.74                                                                              | 0.89                                                                              | 0.33                                                                              |                                                                                   | 0.69                                                                              | 0.51                                                                               | 0.37                                                                                | 0.68                                                                                | 0.90                                                                                | 0.51                                                                                | 0.70                                                                                |
| Control Delay           |                                                                                   | 58.2                                                                              | 46.8                                                                              | 5.3                                                                               |                                                                                   | 60.6                                                                              | 39.3                                                                               | 13.9                                                                                | 65.4                                                                                | 43.5                                                                                | 8.6                                                                                 | 55.9                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 58.2                                                                              | 46.8                                                                              | 5.3                                                                               |                                                                                   | 60.6                                                                              | 39.3                                                                               | 13.9                                                                                | 65.4                                                                                | 43.5                                                                                | 8.6                                                                                 | 55.9                                                                                |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | D                                                                                  | B                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   | E                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 43.5                                                                              |                                                                                   |                                                                                   |                                                                                   | 36.9                                                                               |                                                                                     |                                                                                     | 39.1                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 28.9                                                                              | 94.8                                                                              | 0.0                                                                               |                                                                                   | 16.2                                                                              | 44.8                                                                               | 4.0                                                                                 | 14.2                                                                                | 91.6                                                                                | 24.5                                                                                | 21.0                                                                                |
| Queue Length 95th (m)   |                                                                                   | 42.0                                                                              | #119.1                                                                            | 14.1                                                                              |                                                                                   | #28.7                                                                             | 61.9                                                                               | 32.9                                                                                | 33.8                                                                                | #126.1                                                                              | 7.2                                                                                 | #33.9                                                                               |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                              |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Base Capacity (vph)     |                                                                                   | 423                                                                               | 1150                                                                              | 623                                                                               |                                                                                   | 231                                                                               | 921                                                                                | 570                                                                                 | 317                                                                                 | 982                                                                                 | 599                                                                                 | 306                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.69                                                                              | 0.86                                                                              | 0.32                                                                              |                                                                                   | 0.69                                                                              | 0.50                                                                               | 0.37                                                                                | 0.65                                                                                | 0.90                                                                                | 0.51                                                                                | 0.68                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 76 (69%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 39.4

Intersection LOS: D

Intersection Capacity Utilization 87.4%

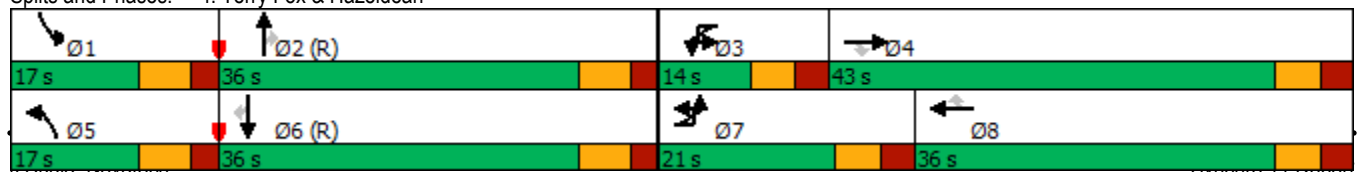
ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean



|                         | ↓     | ↙     |
|-------------------------|-------|-------|
| Lane Group              | SBT   | SBR   |
| Switch Phase            |       |       |
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 35.5  | 35.5  |
| Total Split (s)         | 36.0  | 36.0  |
| Total Split (%)         | 32.7% | 32.7% |
| Maximum Green (s)       | 29.5  | 29.5  |
| Yellow Time (s)         | 4.2   | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 22.0  | 22.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 31.3  | 31.3  |
| Actuated g/C Ratio      | 0.28  | 0.28  |
| v/c Ratio               | 0.53  | 0.61  |
| Control Delay           | 36.5  | 24.3  |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 36.5  | 24.3  |
| LOS                     | D     | C     |
| Approach Delay          | 36.2  |       |
| Approach LOS            | D     |       |
| Queue Length 50th (m)   | 49.4  | 33.7  |
| Queue Length 95th (m)   | 67.0  | 76.0  |
| Internal Link Dist (m)  | 292.2 |       |
| Turn Bay Length (m)     |       | 200.0 |
| Base Capacity (vph)     | 967   | 589   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.53  | 0.61  |
| Intersection Summary    |       |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1559                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1129                                                                                |
| Future Volume (vph)        | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1559                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1129                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.887                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                    | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1317                                                                              | 0                                                                                 | 1567                                                                              | 1516                                                                              | 0                                                                                 | 1768                                                                               | 3489                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3402                                                                                |
| Flt Permitted              | 0.693                                                                             |                                                                                   |                                                                                   | 0.755                                                                             |                                                                                   |                                                                                   | 0.252                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.069                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1284                                                                              | 1317                                                                              | 0                                                                                 | 1238                                                                              | 1516                                                                              | 0                                                                                 | 468                                                                                | 3489                                                                                | 0                                                                                   | 0                                                                                   | 126                                                                                 | 3402                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 89                                                                                |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                    | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                    | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 33%                                                                               | 14%                                                                               | 50%                                                                               | 3%                                                                                | 1%                                                                                 | 2%                                                                                  | 3%                                                                                  | 1%                                                                                  | 3%                                                                                  | 5%                                                                                  |
| Adj. Flow (vph)            | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1559                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1129                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 14                                                                                | 4                                                                                 | 0                                                                                 | 14                                                                                | 99                                                                                | 0                                                                                 | 1                                                                                  | 1589                                                                                | 0                                                                                   | 0                                                                                   | 161                                                                                 | 1129                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                    | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 12    |
| Future Volume (vph)        | 12    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1480  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1436  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 35    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 8%    |
| Adj. Flow (vph)            | 12    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 12    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

6: Terry Fox & Charlie Rogers/Edgewater  
AM Peak Hour

560 Hazeldean Road  
2036 Background Traffic (optimized timing)

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 5.0                                                                                 | 10.0                                                                                |
| Minimum Split (s)       | 36.5                                                                              | 36.5                                                                              |                                                                                   | 36.5                                                                              | 36.5                                                                              |                                                                                   | 34.5                                                                               | 34.5                                                                                |                                                                                     | 11.5                                                                                | 11.5                                                                                | 34.5                                                                                |
| Total Split (s)         | 37.0                                                                              | 37.0                                                                              |                                                                                   | 37.0                                                                              | 37.0                                                                              |                                                                                   | 61.0                                                                               | 61.0                                                                                |                                                                                     | 12.0                                                                                | 12.0                                                                                | 73.0                                                                                |
| Total Split (%)         | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 55.5%                                                                              | 55.5%                                                                               |                                                                                     | 10.9%                                                                               | 10.9%                                                                               | 66.4%                                                                               |
| Maximum Green (s)       | 30.5                                                                              | 30.5                                                                              |                                                                                   | 30.5                                                                              | 30.5                                                                              |                                                                                   | 54.5                                                                               | 54.5                                                                                |                                                                                     | 5.5                                                                                 | 5.5                                                                                 | 66.5                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 3.2                                                                               | 3.2                                                                               |                                                                                   | 3.2                                                                               | 3.2                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                                | 6.5                                                                                 |                                                                                     |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lag                                                                                | Lag                                                                                 |                                                                                     | Lead                                                                                | Lead                                                                                |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | None                                                                                | None                                                                                | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 21.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     | 5                                                                                   |
| Act Effct Green (s)     | 14.0                                                                              | 14.0                                                                              |                                                                                   | 14.0                                                                              | 14.0                                                                              |                                                                                   | 64.0                                                                               | 64.0                                                                                |                                                                                     |                                                                                     | 83.0                                                                                | 83.0                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.58                                                                               | 0.58                                                                                |                                                                                     |                                                                                     | 0.75                                                                                | 0.75                                                                                |
| v/c Ratio               | 0.09                                                                              | 0.02                                                                              |                                                                                   | 0.09                                                                              | 0.37                                                                              |                                                                                   | 0.00                                                                               | 0.78                                                                                |                                                                                     |                                                                                     | 0.58                                                                                | 0.44                                                                                |
| Control Delay           | 39.2                                                                              | 25.5                                                                              |                                                                                   | 47.0                                                                              | 28.5                                                                              |                                                                                   | 7.0                                                                                | 14.6                                                                                |                                                                                     |                                                                                     | 26.7                                                                                | 6.7                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 39.2                                                                              | 25.5                                                                              |                                                                                   | 47.0                                                                              | 28.5                                                                              |                                                                                   | 7.0                                                                                | 14.6                                                                                |                                                                                     |                                                                                     | 26.7                                                                                | 6.7                                                                                 |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | B                                                                                   |                                                                                     |                                                                                     | C                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 36.2                                                                              |                                                                                   |                                                                                   | 30.8                                                                              |                                                                                   |                                                                                    | 14.6                                                                                |                                                                                     |                                                                                     |                                                                                     | 9.1                                                                                 |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   | 2.6                                                                               | 0.2                                                                               |                                                                                   | 2.5                                                                               | 7.8                                                                               |                                                                                   | 0.0                                                                                | 162.6                                                                               |                                                                                     |                                                                                     | 11.4                                                                                | 29.5                                                                                |
| Queue Length 95th (m)   | 6.6                                                                               | 2.6                                                                               |                                                                                   | m7.9                                                                              | 23.4                                                                              |                                                                                   | m0.1                                                                               | #44.2                                                                               |                                                                                     |                                                                                     | #55.8                                                                               | 79.8                                                                                |
| Internal Link Dist (m)  |                                                                                   | 193.1                                                                             |                                                                                   |                                                                                   | 258.1                                                                             |                                                                                   |                                                                                    | 229.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 336.0                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 65.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |                                                                                     |
| Base Capacity (vph)     | 356                                                                               | 367                                                                               |                                                                                   | 343                                                                               | 484                                                                               |                                                                                   | 272                                                                                | 2032                                                                                |                                                                                     |                                                                                     | 277                                                                                 | 2566                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.04                                                                              | 0.01                                                                              |                                                                                   | 0.04                                                                              | 0.20                                                                              |                                                                                   | 0.00                                                                               | 0.78                                                                                |                                                                                     |                                                                                     | 0.58                                                                                | 0.44                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 14 (13%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 12.9

Intersection LOS: B

Intersection Capacity Utilization 83.1%

ICU Level of Service E

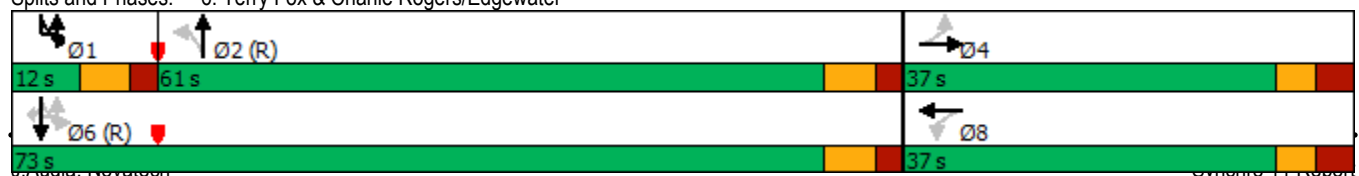
Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater



0.0000, 11/01/2011

Dynamic Traffic Report

|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 73.0  |
| Total Split (%)         | 66.4% |
| Maximum Green (s)       | 66.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 83.0  |
| Actuated g/C Ratio      | 0.75  |
| v/c Ratio               | 0.01  |
| Control Delay           | 0.2   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.2   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.5   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1092  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 340                                                                               | 1206                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1369                                                                               | 114                                                                                 | 21                                                                                  | 304                                                                                 | 135                                                                                 | 138                                                                                 |
| Future Volume (vph)        | 2                                                                                 | 340                                                                               | 1206                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1369                                                                               | 114                                                                                 | 21                                                                                  | 304                                                                                 | 135                                                                                 | 138                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                    | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                    |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 0.99                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3537                                                                               | 1582                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3426                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3391                                                                              | 3537                                                                               | 1555                                                                                | 1746                                                                                | 3502                                                                                | 1539                                                                                | 3410                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 128                                                                                 |                                                                                     |                                                                                     | 134                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                              |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                               |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 1%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 340                                                                               | 1206                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1369                                                                               | 114                                                                                 | 21                                                                                  | 304                                                                                 | 135                                                                                 | 138                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 342                                                                               | 1228                                                                              | 0                                                                                 | 0                                                                                 | 185                                                                               | 1369                                                                               | 114                                                                                 | 21                                                                                  | 304                                                                                 | 135                                                                                 | 138                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 97                                                                                | 14                                                                                | 97                                                                                |                                                                                    | 14                                                                                  | 97                                                                                  |                                                                                     | 97                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                  |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                  | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 493   | 440   |
| Future Volume (vph)        | 493   | 440   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 60.0  |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3502  | 1582  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3502  | 1555  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 176   |
| Link Speed (k/h)           | 50    |       |
| Link Distance (m)          | 251.2 |       |
| Travel Time (s)            | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 2%    | 1%    |
| Adj. Flow (vph)            | 493   | 440   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 493   | 440   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | R NA  |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 4     |       |
| Permitted Phases           |       | 4     |
| Detector Phase             | 4     | 4     |
| Switch Phase               |       |       |



1: Hazeldean & Robert Grant  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic (demand rationalized)

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 61.0                                                                              |                                                                                   | 15.0                                                                              | 15.0                                                                              | 60.0                                                                                | 60.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 12.3%                                                                             | 12.3%                                                                             | 46.9%                                                                             |                                                                                   | 11.5%                                                                             | 11.5%                                                                             | 46.2%                                                                               | 46.2%                                                                               | 9.2%                                                                                | 32.3%                                                                               | 32.3%                                                                               | 9.2%                                                                                |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 54.9                                                                              |                                                                                   | 8.9                                                                               | 8.9                                                                               | 53.9                                                                                | 53.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                 | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                               | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                                | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 17.6                                                                              | 63.2                                                                              |                                                                                   |                                                                                   | 10.2                                                                              | 55.9                                                                                | 55.9                                                                                |                                                                                     | 5.8                                                                                 | 26.2                                                                                | 5.9                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.49                                                                              |                                                                                   |                                                                                   | 0.08                                                                              | 0.43                                                                                | 0.43                                                                                |                                                                                     | 0.04                                                                                | 0.20                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.74                                                                              | 0.72                                                                              |                                                                                   |                                                                                   | 0.69                                                                              | 0.90                                                                                | 0.15                                                                                |                                                                                     | 0.27                                                                                | 0.43                                                                                | 0.89                                                                                |
| Control Delay           |                                                                                   | 65.1                                                                              | 31.5                                                                              |                                                                                   |                                                                                   | 85.8                                                                              | 30.1                                                                                | 1.9                                                                                 |                                                                                     | 68.8                                                                                | 45.6                                                                                | 109.3                                                                               |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 65.1                                                                              | 31.5                                                                              |                                                                                   |                                                                                   | 85.8                                                                              | 30.1                                                                                | 1.9                                                                                 |                                                                                     | 68.8                                                                                | 45.6                                                                                | 109.3                                                                               |
| LOS                     |                                                                                   | E                                                                                 | C                                                                                 |                                                                                   |                                                                                   | F                                                                                 | C                                                                                   | A                                                                                   |                                                                                     | E                                                                                   | D                                                                                   | F                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 38.8                                                                              |                                                                                   |                                                                                   |                                                                                   | 34.3                                                                                |                                                                                     |                                                                                     | 35.6                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | C                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 42.0                                                                              | 133.8                                                                             |                                                                                   |                                                                                   | 19.1                                                                              | 180.5                                                                               | 4.6                                                                                 |                                                                                     | 4.9                                                                                 | 31.2                                                                                | 17.0                                                                                |
| Queue Length 95th (m)   |                                                                                   | #81.1                                                                             | 160.8                                                                             |                                                                                   |                                                                                   | m#37.5                                                                            | #198.7                                                                              | m2.6                                                                                |                                                                                     | 13.1                                                                                | 41.8                                                                                | #34.8                                                                               |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                               |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               |                                                                                     | 100.0                                                                               |                                                                                     | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 463                                                                               | 1698                                                                              |                                                                                   |                                                                                   | 267                                                                               | 1520                                                                                | 741                                                                                 |                                                                                     | 79                                                                                  | 967                                                                                 | 155                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.74                                                                              | 0.72                                                                              |                                                                                   |                                                                                   | 0.69                                                                              | 0.90                                                                                | 0.15                                                                                |                                                                                     | 0.27                                                                                | 0.31                                                                                | 0.89                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 15 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 40.4

Intersection LOS: D

Intersection Capacity Utilization 104.0%

ICU Level of Service G

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Hazeldean & Robert Grant



03/10/2014, 11:04:00 AM

Dynamic TTI Report

|                         | ↓     | ↙      |
|-------------------------|-------|--------|
| Lane Group              | SBT   | SBR    |
| Minimum Initial (s)     | 10.0  | 10.0   |
| Minimum Split (s)       | 41.1  | 41.1   |
| Total Split (s)         | 42.0  | 42.0   |
| Total Split (%)         | 32.3% | 32.3%  |
| Maximum Green (s)       | 35.9  | 35.9   |
| Yellow Time (s)         | 3.3   | 3.3    |
| All-Red Time (s)        | 2.8   | 2.8    |
| Lost Time Adjust (s)    | 0.0   | 0.0    |
| Total Lost Time (s)     | 6.1   | 6.1    |
| Lead/Lag                | Lag   | Lag    |
| Lead-Lag Optimize?      |       |        |
| Vehicle Extension (s)   | 3.0   | 3.0    |
| Recall Mode             | None  | None   |
| Walk Time (s)           | 7.0   | 7.0    |
| Flash Dont Walk (s)     | 28.0  | 28.0   |
| Pedestrian Calls (#/hr) | 5     | 5      |
| Act Effct Green (s)     | 31.0  | 31.0   |
| Actuated g/C Ratio      | 0.24  | 0.24   |
| v/c Ratio               | 0.59  | 0.87   |
| Control Delay           | 46.4  | 46.3   |
| Queue Delay             | 0.0   | 0.0    |
| Total Delay             | 46.4  | 46.3   |
| LOS                     | D     | D      |
| Approach Delay          | 54.4  |        |
| Approach LOS            | D     |        |
| Queue Length 50th (m)   | 53.8  | 62.9   |
| Queue Length 95th (m)   | 67.5  | #101.0 |
| Internal Link Dist (m)  | 227.2 |        |
| Turn Bay Length (m)     |       | 60.0   |
| Base Capacity (vph)     | 967   | 556    |
| Starvation Cap Reductn  | 0     | 0      |
| Spillback Cap Reductn   | 0     | 0      |
| Storage Cap Reductn     | 0     | 0      |
| Reduced v/c Ratio       | 0.51  | 0.79   |
| Intersection Summary    |       |        |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic (demand rationalized)

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 409                                                                               | 859                                                                               | 294                                                                               | 14                                                                                | 340                                                                               | 912                                                                                | 348                                                                                 | 304                                                                                 | 814                                                                                 | 234                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 2                                                                                 | 409                                                                               | 859                                                                               | 294                                                                               | 14                                                                                | 340                                                                               | 912                                                                                | 348                                                                                 | 304                                                                                 | 814                                                                                 | 234                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.95                                                                              |                                                                                   | 0.99                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 3364                                                                              | 3537                                                                              | 1551                                                                              | 0                                                                                 | 3398                                                                              | 3537                                                                               | 1551                                                                                | 3397                                                                                | 3468                                                                                | 1567                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 3358                                                                              | 3537                                                                              | 1481                                                                              | 0                                                                                 | 3368                                                                              | 3537                                                                               | 1521                                                                                | 3386                                                                                | 3468                                                                                | 1527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 232                                                                               |                                                                                   |                                                                                   |                                                                                    | 174                                                                                 |                                                                                     |                                                                                     | 150                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 795.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 47.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 24                                                                                |                                                                                   | 24                                                                                |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 3%                                                                                  | 2%                                                                                  | 3%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 409                                                                               | 859                                                                               | 294                                                                               | 14                                                                                | 340                                                                               | 912                                                                                | 348                                                                                 | 304                                                                                 | 814                                                                                 | 234                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 411                                                                               | 859                                                                               | 294                                                                               | 0                                                                                 | 354                                                                               | 912                                                                                | 348                                                                                 | 304                                                                                 | 814                                                                                 | 234                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic (demand rationalized)

|                            |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                 | SBL                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations        |  |  |  |
| Traffic Volume (vph)       | 306                                                                               | 819                                                                               | 467                                                                               |
| Future Volume (vph)        | 306                                                                               | 819                                                                               | 467                                                                               |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)         | 155.0                                                                             |                                                                                   | 200.0                                                                             |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              |
| Ped Bike Factor            | 0.99                                                                              |                                                                                   | 0.98                                                                              |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)          | 3431                                                                              | 3502                                                                              | 1567                                                                              |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)          | 3408                                                                              | 3502                                                                              | 1537                                                                              |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 265                                                                               |
| Link Speed (k/h)           |                                                                                   | 70                                                                                |                                                                                   |
| Link Distance (m)          |                                                                                   | 316.2                                                                             |                                                                                   |
| Travel Time (s)            |                                                                                   | 16.3                                                                              |                                                                                   |
| Confl. Peds. (#/hr)        | 10                                                                                |                                                                                   | 5                                                                                 |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 2%                                                                                |
| Adj. Flow (vph)            | 306                                                                               | 819                                                                               | 467                                                                               |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)      | 307                                                                               | 819                                                                               | 467                                                                               |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)            |                                                                                   | 10.0                                                                              |                                                                                   |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 | 1                                                                                 |
| Detector Template          | Left                                                                              | Thru                                                                              | Right                                                                             |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              |
| Protected Phases           | 1                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   | 6                                                                                 |
| Detector Phase             | 1                                                                                 | 6                                                                                 | 6                                                                                 |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2036 Background Traffic (demand rationalized)

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                               | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                               | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 23.0                                                                              | 23.0                                                                              | 42.0                                                                              | 42.0                                                                              | 23.0                                                                              | 23.0                                                                              | 42.0                                                                               | 42.0                                                                                | 18.0                                                                                | 37.0                                                                                | 37.0                                                                                | 18.0                                                                                |
| Total Split (%)         | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                             | 35.0%                                                                             | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                              | 35.0%                                                                               | 15.0%                                                                               | 30.8%                                                                               | 30.8%                                                                               | 15.0%                                                                               |
| Maximum Green (s)       | 16.5                                                                              | 16.5                                                                              | 35.5                                                                              | 35.5                                                                              | 16.5                                                                              | 16.5                                                                              | 35.5                                                                               | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                | 11.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 24                                                                                | 24                                                                                |                                                                                   |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 16.4                                                                              | 35.0                                                                              | 35.0                                                                              |                                                                                   | 15.8                                                                              | 34.4                                                                               | 34.4                                                                                | 12.0                                                                                | 31.2                                                                                | 31.2                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.29                                                                              | 0.29                                                                              |                                                                                   | 0.13                                                                              | 0.29                                                                               | 0.29                                                                                | 0.10                                                                                | 0.26                                                                                | 0.26                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.90                                                                              | 0.83                                                                              | 0.49                                                                              |                                                                                   | 0.79                                                                              | 0.90                                                                               | 0.62                                                                                | 0.89                                                                                | 0.90                                                                                | 0.46                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 73.9                                                                              | 47.9                                                                              | 11.3                                                                              |                                                                                   | 52.0                                                                              | 61.8                                                                               | 33.6                                                                                | 90.7                                                                                | 49.4                                                                                | 10.1                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 73.9                                                                              | 47.9                                                                              | 11.3                                                                              |                                                                                   | 52.0                                                                              | 61.8                                                                               | 33.6                                                                                | 90.7                                                                                | 49.4                                                                                | 10.4                                                                                |                                                                                     |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | B                                                                                 |                                                                                   | D                                                                                 | E                                                                                  | C                                                                                   | F                                                                                   | D                                                                                   | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 47.8                                                                              |                                                                                   |                                                                                   |                                                                                   | 53.6                                                                               |                                                                                     |                                                                                     | 51.9                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 45.7                                                                              | 91.2                                                                              | 9.9                                                                               |                                                                                   | 38.8                                                                              | 105.7                                                                              | 44.8                                                                                | 28.8                                                                                | 91.5                                                                                | 17.0                                                                                |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | #70.6                                                                             | 113.7                                                                             | 32.2                                                                              |                                                                                   | #52.4                                                                             | #133.1                                                                             | 82.3                                                                                | #60.6                                                                               | #125.0                                                                              | 9.0                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 771.2                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                              |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 462                                                                               | 1046                                                                              | 601                                                                               |                                                                                   | 467                                                                               | 1046                                                                               | 572                                                                                 | 340                                                                                 | 901                                                                                 | 507                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 37                                                                                  |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.89                                                                              | 0.82                                                                              | 0.49                                                                              |                                                                                   | 0.76                                                                              | 0.87                                                                               | 0.61                                                                                | 0.89                                                                                | 0.90                                                                                | 0.50                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 54.7

Intersection LOS: D

Intersection Capacity Utilization 100.9%

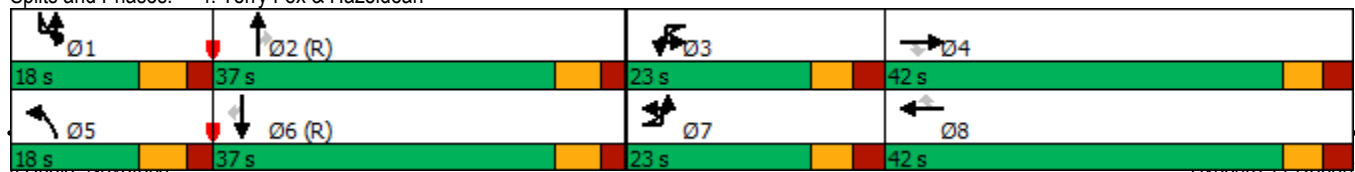
ICU Level of Service G

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean





| Lane Group              | SBL   | SBT    | SBR   |
|-------------------------|-------|--------|-------|
| Switch Phase            |       |        |       |
| Minimum Initial (s)     | 5.0   | 10.0   | 10.0  |
| Minimum Split (s)       | 11.5  | 35.5   | 35.5  |
| Total Split (s)         | 18.0  | 37.0   | 37.0  |
| Total Split (%)         | 15.0% | 30.8%  | 30.8% |
| Maximum Green (s)       | 11.5  | 30.5   | 30.5  |
| Yellow Time (s)         | 4.2   | 4.2    | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3    | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0    | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5    | 6.5   |
| Lead/Lag                | Lead  | Lag    | Lag   |
| Lead-Lag Optimize?      |       |        |       |
| Vehicle Extension (s)   | 3.0   | 3.0    | 3.0   |
| Recall Mode             | None  | C-Max  | C-Max |
| Walk Time (s)           |       | 7.0    | 7.0   |
| Flash Dont Walk (s)     |       | 22.0   | 22.0  |
| Pedestrian Calls (#/hr) |       | 10     | 10    |
| Act Effct Green (s)     | 12.0  | 31.2   | 31.2  |
| Actuated g/C Ratio      | 0.10  | 0.26   | 0.26  |
| v/c Ratio               | 0.90  | 0.90   | 0.78  |
| Control Delay           | 83.5  | 57.8   | 30.9  |
| Queue Delay             | 51.8  | 0.0    | 0.0   |
| Total Delay             | 135.3 | 57.8   | 30.9  |
| LOS                     | F     | E      | C     |
| Approach Delay          |       | 64.9   |       |
| Approach LOS            |       | E      |       |
| Queue Length 50th (m)   | 36.8  | 71.4   | 29.1  |
| Queue Length 95th (m)   | #61.1 | #122.0 | #92.8 |
| Internal Link Dist (m)  |       | 292.2  |       |
| Turn Bay Length (m)     | 155.0 |        | 200.0 |
| Base Capacity (vph)     | 343   | 910    | 595   |
| Starvation Cap Reductn  | 0     | 0      | 0     |
| Spillback Cap Reductn   | 102   | 0      | 0     |
| Storage Cap Reductn     | 0     | 0      | 0     |
| Reduced v/c Ratio       | 1.27  | 0.90   | 0.78  |
| Intersection Summary    |       |        |       |

## **APPENDIX K**

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### MMLOS Analysis

## Segment MMLOS Analysis

This section provides an existing conditions review of the boundary street Hazeldean Road, using complete streets principles. The *Multi-Modal Level of Service (MMLOS) Guidelines*, produced by IBI Group in October 2015, were used to evaluate the levels of service for each alternative mode of transportation on Hazeldean Road, based on the targets for Arterial Mainstreets.

Exhibit 4 of the *MMLOS Guidelines* has been used to evaluate the segment pedestrian level of service (PLOS) of Hazeldean Road. Exhibit 22 of the *MMLOS Guidelines* identifies a target PLOS C for all Arterial Mainstreets. The results of the segment PLOS analysis are summarized in **Table 1**.

Exhibit 11 of the *MMLOS Guidelines* has been used to evaluate the segment bicycle level of service (BLOS) of Hazeldean Road. Exhibit 22 of the *MMLOS Guidelines* identifies a target BLOS C for Arterial Mainstreets with a Spine Route designation. The results of the segment BLOS analysis are summarized in **Table 2**.

Exhibit 15 of the *MMLOS Guidelines* has been used to evaluate the segment transit level of service (TLOS) of Hazeldean Road. Exhibit 22 of the *MMLOS Guidelines* identifies a target TLOS D for Arterial Mainstreets that is a designated Transit Priority Corridor with Isolated Measures. The results of the segment TLOS analysis are summarized in **Table 3**.

Exhibit 20 of the *MMLOS Guidelines* has been used to evaluate the segment truck level of service (TkLOS) of Hazeldean Road. Exhibit 22 of the *MMLOS Guidelines* identifies a target TkLOS D for Arterial Mainstreets with a truck route designation. The results of the segment TkLOS analysis are summarized in **Table 4**.

**Table 1: PLOS Segment Analysis**

| Sidewalk Width                                                  | Boulevard Width | Avg. Daily Curb Lane Traffic Volume | Presence of On-Street Parking | Operating Speed <sup>(1)</sup> | PLOS     |
|-----------------------------------------------------------------|-----------------|-------------------------------------|-------------------------------|--------------------------------|----------|
| <b>Hazeldean Road (south side, Mantra Street to Carp River)</b> |                 |                                     |                               |                                |          |
| ≥ 2.0m                                                          | > 2.0m          | > 3,000 vpd                         | No                            | 70 km/h                        | <b>D</b> |

1. Operating speed taken as the speed limit plus 10 km/h.

**Table 2: BLOS Segment Analysis**

| Road Class                                          | Route Type  | Bikeway Type       | Travel Lanes    | Operating Speed | Bike Lane Width | Bike Lane Blockage | BLOS     |
|-----------------------------------------------------|-------------|--------------------|-----------------|-----------------|-----------------|--------------------|----------|
| <b>Hazeldean Road (Mantra Street to Carp River)</b> |             |                    |                 |                 |                 |                    |          |
| Arterial                                            | Spine Route | Curbside Bike Lane | 2 per direction | 70 km/h         | ≥ 1.8m          | Rare               | <b>E</b> |

**Table 3: TLOS Segment Analysis**

| Facility Type                                     | Exposure to Congestion Delay, Friction, and Incidents |          |                    | TLOS |
|---------------------------------------------------|-------------------------------------------------------|----------|--------------------|------|
|                                                   | Congestion                                            | Friction | Incident Potential |      |
| Hazeldean Road (Mantra Street to Carp River)      |                                                       |          |                    |      |
| Mixed Traffic – Limited Parking/Driveway Friction | Yes                                                   | Low      | Medium             | D    |

**Table 4: TkLOS Segment Analysis**

| Curb Lane Width                                     | Number of Travel Lanes Per Direction | TkLOS    |
|-----------------------------------------------------|--------------------------------------|----------|
| <b>Hazeldean Road (Mantra Street to Carp River)</b> |                                      |          |
| ≤ 3.5m                                              | 2                                    | <b>A</b> |



## Intersection MMLOS Analysis

The following is an existing conditions review of the MMLOS of the signalized intersections within the study area, using complete streets principles. The MMLOS targets associated with Arterial Mainstreets have been considered for all intersections with Hazeldean Road, and the targets associated with the 'General Urban Area' designation have been considered for all intersections with Terry Fox Drive. Whichever target is stricter has been considered for the intersection at Hazeldean Road/Terry Fox Drive.

Exhibit 5 of the *Addendum to the MMLOS Guidelines* has been used to evaluate the existing PLOS at the study area intersections. Exhibit 22 of the *MMLOS Guidelines* suggests a target PLOS C for Arterial Mainstreets or all roadways within the General Urban Area. The results of the intersection PLOS analysis are summarized in **Table 5** through **Table 13**.

Exhibit 12 of the *MMLOS Guidelines* has been used to evaluate the existing BLOS at the study area intersections. Exhibit 22 of the *MMLOS Guidelines* suggests a target BLOS C for Arterial Mainstreets or roadways within the General Urban Area with a Spine Route designation (Hazeldean Road, Terry Fox Drive), and a target BLOS D for all roadways with no cycling route designation (all roadways crossing Hazeldean Road or Terry Fox Drive). The results of the intersection BLOS analysis are summarized in **Table 14**.

Exhibit 16 of the *MMLOS Guidelines* has been used to evaluate the existing TLOS at the study area intersections. Exhibit 22 of the *MMLOS Guidelines* identifies a target TLOS D for Transit Priority Corridors with Isolated Measures (Hazeldean Road and Terry Fox Drive north of Hazeldean Road), and does not identify a target TLOS for roadways without a Rapid Transit or Transit Priority designation (Terry Fox Drive south of Hazeldean Road). No target TLOS is identified for the roadways crossing Hazeldean Road or Terry Fox Drive. The TLOS has been evaluated for every approach that is currently used by transit. The results of the intersection TLOS analysis are summarized in **Table 15**.

Exhibit 21 of the *MMLOS Guidelines* has been used to evaluate the existing TkLOS at the study area intersections. Exhibit 22 of the *MMLOS Guidelines* identifies a target TkLOS D for Arterial Mainstreets and roadways within the General Urban Area with a truck route designation. No target TkLOS is identified for the roadways crossing Hazeldean Road or Terry Fox Drive. The results of the intersection TkLOS analysis are summarized in **Table 16**.

Table 5: PLOS Intersection Analysis – Hazeldean Road/325m East of Iber Road

| CRITERIA                         | North Approach      |      | East Approach       |     | West Approach           |    |
|----------------------------------|---------------------|------|---------------------|-----|-------------------------|----|
| PETSI SCORE                      |                     |      |                     |     |                         |    |
| CROSSING DISTANCE CONDITIONS     |                     |      |                     |     |                         |    |
| Median > 2.4m in Width           | No                  | 6    | No                  | -10 | No                      | 23 |
| Lanes Crossed (3.5m Lane Width)  | 9                   |      | 10 +                |     | 8                       |    |
| SIGNAL PHASING AND TIMING        |                     |      |                     |     |                         |    |
| Left Turn Conflict               | Permissive          | -8   | Permissive          | -8  | No Left Turn/Prohibited | 0  |
| Right Turn Conflict              | Permissive or Yield | -5   | Permissive or Yield | -5  | Permissive or Yield     | -5 |
| Right Turn on Red                | RTOR Allowed        | -3   | N/A                 | 0   | N/A                     | 0  |
| Leading Pedestrian Interval      | No                  | -2   | No                  | -2  | No                      | -2 |
| CORNER RADIUS                    |                     |      |                     |     |                         |    |
| Parallel Radius                  | > 15m to 25m        | -8   | No Right Turn       | 0   | > 10m to 15m            | -6 |
| Parallel Right Turn Channel      | Smart Channel       | 2    | No Right Turn       | 0   | No Right Turn Channel   | -4 |
| Perpendicular Radius             | N/A                 | 0    | > 15m to 25m        | -8  | N/A                     | 0  |
| Perpendicular Right Turn Channel | N/A                 | 0    | Smart Channel       | 2   | N/A                     | 0  |
| CROSSING TREATMENT               |                     |      |                     |     |                         |    |
| Treatment                        | Standard            | -7   | Standard            | -7  | Standard                | -7 |
| PETSI SCORE                      |                     | -25  |                     |     | -38                     | -1 |
| LOS                              |                     | F    |                     |     | F                       | F  |
| DELAY SCORE                      |                     |      |                     |     |                         |    |
| Cycle Length                     | 115                 |      | 120                 |     | 120                     |    |
| Pedestrian Walk Time             | 59.9                |      | 7.9                 |     | 7.9                     |    |
| DELAY SCORE                      |                     | 13.2 | 52.4                |     | 52.4                    |    |
| LOS                              |                     | B    | E                   |     | E                       |    |
| OVERALL                          |                     | F    | F                   |     | F                       |    |

Table 6: PLOS Intersection Analysis – Hazeldean Road/Roger Griffiths Avenue

| CRITERIA                         |                     | North Approach |                         | West Approach |  |
|----------------------------------|---------------------|----------------|-------------------------|---------------|--|
| PETSI SCORE                      |                     |                |                         |               |  |
| CROSSING DISTANCE CONDITIONS     |                     |                |                         |               |  |
| Median > 2.4m in Width           | No                  | -10            | No                      | 39            |  |
| Lanes Crossed (3.5m Lane Width)  | 10 +                |                | 7                       |               |  |
| SIGNAL PHASING AND TIMING        |                     |                |                         |               |  |
| Left Turn Conflict               | Perm + Prot         | -8             | No Left Turn/Prohibited | 0             |  |
| Right Turn Conflict              | Permissive or Yield | -5             | Perm + Prot             | -5            |  |
| Right Turn on Red                | RTOR Allowed        | -3             | N/A                     | 0             |  |
| Leading Pedestrian Interval      | No                  | -2             | No                      | -2            |  |
| CORNER RADIUS                    |                     |                |                         |               |  |
| Parallel Radius                  | > 15m to 25m        | -8             | > 10m to 15m            | -6            |  |
| Parallel Right Turn Channel      | Smart Channel       | 2              | No Right Turn Channel   | -4            |  |
| Perpendicular Radius             | N/A                 | 0              | N/A                     | 0             |  |
| Perpendicular Right Turn Channel | N/A                 | 0              | N/A                     | 0             |  |
| CROSSING TREATMENT               |                     |                |                         |               |  |
| Treatment                        | Standard            | -7             | Standard                | -7            |  |
| PETSI SCORE                      |                     | -41            | 15                      |               |  |
| LOS                              |                     | F              | F                       |               |  |
| DELAY SCORE                      |                     |                |                         |               |  |
| Cycle Length                     |                     | 115            |                         | 120           |  |
| Pedestrian Walk Time             |                     | 37.7           |                         | 8.8           |  |
| DELAY SCORE                      |                     | 26.0           | 51.5                    |               |  |
| LOS                              |                     | C              | E                       |               |  |
| OVERALL                          |                     | F              | F                       |               |  |

Table 7: PLOS Intersection Analysis – Hazeldean Road/Mantra Street/Tillage Street

| CRITERIA                         | North Approach      |      | South Approach        |    | East Approach         |      | West Approach         |      |
|----------------------------------|---------------------|------|-----------------------|----|-----------------------|------|-----------------------|------|
| PETSİ SCORE                      |                     |      |                       |    |                       |      |                       |      |
| CROSSING DISTANCE CONDITIONS     |                     |      |                       |    |                       |      |                       |      |
| Median > 2.4m in Width           | No                  | -10  | No                    | 72 | No                    | 6    | No                    | 55   |
| Lanes Crossed (3.5m Lane Width)  | 10 +                |      | 5                     |    | 9                     |      | 6                     |      |
| SIGNAL PHASING AND TIMING        |                     |      |                       |    |                       |      |                       |      |
| Left Turn Conflict               | Perm + Prot         | -8   | Perm + Prot           | -8 | Protected             | 0    | Protected             | 0    |
| Right Turn Conflict              | Permissive or Yield | -5   | Permissive or Yield   | -5 | Permissive or Yield   | -5   | Permissive or Yield   | -5   |
| Right Turn on Red                | RTOR Allowed        | -3   | RTOR Allowed          | -3 | N/A                   | 0    | RTOR Allowed          | -3   |
| Leading Pedestrian Interval      | No                  | -2   | No                    | -2 | No                    | -2   | No                    | -2   |
| CORNER RADIUS                    |                     |      |                       |    |                       |      |                       |      |
| Parallel Radius                  | > 15m to 25m        | -8   | > 5m to 10m           | -5 | > 10m to 15m          | -6   | > 10m to 15m          | -6   |
| Parallel Right Turn Channel      | Smart Channel       | 2    | No Right Turn Channel | -4 | No Right Turn Channel | -4   | No Right Turn Channel | -4   |
| Perpendicular Radius             | N/A                 | 0    | N/A                   | 0  | > 15m to 25m          | -8   | N/A                   | 0    |
| Perpendicular Right Turn Channel | N/A                 | 0    | N/A                   | 0  | Smart Channel         | 2    | N/A                   | 0    |
| CROSSING TREATMENT               |                     |      |                       |    |                       |      |                       |      |
| Treatment                        | Standard            | -7   | Zebra Stripe          | -4 | Standard              | -7   | Standard              | -7   |
| PETSİ SCORE                      |                     | -41  |                       |    | 41                    | -24  |                       | 28   |
| LOS                              |                     | F    |                       |    | E                     | F    |                       | F    |
| DELAY SCORE                      |                     |      |                       |    |                       |      |                       |      |
| Cycle Length                     | 120                 |      |                       |    | 120                   | 120  |                       | 120  |
| Pedestrian Walk Time             | 18.7                |      |                       |    | 18.7                  | 7.5  |                       | 7.5  |
| DELAY SCORE                      |                     | 42.8 |                       |    | 42.8                  | 52.7 |                       | 52.7 |
| LOS                              |                     | E    |                       |    | E                     | E    |                       | E    |
| OVERALL                          |                     | F    |                       |    | E                     | F    |                       | F    |

Table 8: PLOS Intersection Analysis – Hazeldean Road/Terry Fox Drive

| CRITERIA                         | North Approach                 |      | South Approach                 |      | East Approach                  |              | West Approach                  |      |
|----------------------------------|--------------------------------|------|--------------------------------|------|--------------------------------|--------------|--------------------------------|------|
| PETS I SCORE                     |                                |      |                                |      |                                |              |                                |      |
| CROSSING DISTANCE CONDITIONS     |                                |      |                                |      |                                |              |                                |      |
| Median > 2.4m in Width           | No                             | -10  | No                             | -10  | No                             | -10          | No                             | -10  |
| Lanes Crossed (3.5m Lane Width)  | 10 +                           |      | 10 +                           |      | 10 +                           |              | 10 +                           |      |
| SIGNAL PHASING AND TIMING        |                                |      |                                |      |                                |              |                                |      |
| Left Turn Conflict               | Protected                      | 0    | Protected                      | 0    | Protected                      | 0            | Protected                      | 0    |
| Right Turn Conflict              | Permissive or Yield            | -5   | Permissive or Yield            | -5   | Permissive or Yield            | -5           | Permissive or Yield            | -5   |
| Right Turn on Red                | N/A                            | 0    | N/A                            | 0    | N/A                            | 0            | N/A                            | 0    |
| Leading Pedestrian Interval      | No                             | -2   | No                             | -2   | No                             | -2           | No                             | -2   |
| CORNER RADIUS                    |                                |      |                                |      |                                |              |                                |      |
| Parallel Radius                  | > 15m to 25m                   | -8   | > 15m to 25m                   | -8   | > 15m to 25m                   | -8           | > 25m                          | -9   |
| Parallel Right Turn Channel      | Conventional with Receiving    | -3   | Conventional without Receiving | 0    | Conventional without Receiving | 0            | Conventional without Receiving | 0    |
| Perpendicular Radius             | > 25m                          | -9   | > 15m to 25m                   | -8   | > 15m to 25m                   | -8           | > 15m to 25m                   | -8   |
| Perpendicular Right Turn Channel | Conventional without Receiving | 0    | Conventional without Receiving | 0    | Conventional with Receiving    | -3           | Conventional without Receiving | 0    |
| CROSSING TREATMENT               |                                |      |                                |      |                                |              |                                |      |
| Treatment                        | Standard                       | -7   | Standard                       | -7   | Standard                       | -7           | Standard                       | -7   |
| PETS I SCORE                     |                                | -44  | PETS I SCORE                   |      | -40                            | PETS I SCORE |                                | -43  |
| LOS                              |                                | F    | LOS                            |      | F                              | LOS          |                                | F    |
| DELAY SCORE                      |                                |      |                                |      |                                |              |                                |      |
| Cycle Length                     |                                | 110  |                                | 120  |                                | 120          |                                | 120  |
| Pedestrian Walk Time             |                                | 8.5  |                                | 13.5 |                                | 8.5          |                                | 8.5  |
| DELAY SCORE                      |                                | 46.8 | DELAY SCORE                    |      | 47.3                           | DELAY SCORE  |                                | 51.8 |
| LOS                              |                                | E    | LOS                            |      | E                              | LOS          |                                | E    |
| OVERALL                          |                                | F    | OVERALL                        |      | F                              | OVERALL      |                                | F    |

Table 9: PLOS Intersection Analysis – Hazeldean Road/Edgewater Street

| CRITERIA                         | North Approach        |      | East Approach            |    | West Approach           |    |
|----------------------------------|-----------------------|------|--------------------------|----|-------------------------|----|
| PETSI SCORE                      |                       |      |                          |    |                         |    |
| CROSSING DISTANCE CONDITIONS     |                       |      |                          |    |                         |    |
| Median > 2.4m in Width           | No                    | 39   | No                       | 55 | No                      | 39 |
| Lanes Crossed (3.5m Lane Width)  | 7                     |      | 6                        |    | 7                       |    |
| SIGNAL PHASING AND TIMING        |                       |      |                          |    |                         |    |
| Left Turn Conflict               | Permissive            | -8   | Permissive               | -8 | No Left Turn/Prohibited | 0  |
| Right Turn Conflict              | Permissive or Yield   | -5   | No Right Turn/Prohibited | 0  | Permissive or Yield     | -5 |
| Right Turn on Red                | RTOR Allowed          | -3   | RTOR Allowed             | -3 | N/A                     | 0  |
| Leading Pedestrian Interval      | No                    | -2   | No                       | -2 | No                      | -2 |
| CORNER RADIUS                    |                       |      |                          |    |                         |    |
| Parallel Radius                  | > 15m to 25m          | -8   | No Right Turn            | 0  | > 10m to 15m            | -6 |
| Parallel Right Turn Channel      | No Right Turn Channel | -4   | No Right Turn            | 0  | No Right Turn Channel   | -4 |
| Perpendicular Radius             | N/A                   | 0    | N/A                      | 0  | N/A                     | 0  |
| Perpendicular Right Turn Channel | N/A                   | 0    | N/A                      | 0  | N/A                     | 0  |
| CROSSING TREATMENT               |                       |      |                          |    |                         |    |
| Treatment                        | Standard              | -7   | Standard                 | -7 | Standard                | -7 |
| PETSI SCORE                      |                       | 2    |                          |    | 35                      | 15 |
| LOS                              |                       | F    |                          |    | E                       | F  |
| DELAY SCORE                      |                       |      |                          |    |                         |    |
| Cycle Length                     | 110                   |      | 120                      |    | 120                     |    |
| Pedestrian Walk Time             | 51.8                  |      | 6.9                      |    | 6.9                     |    |
| DELAY SCORE                      |                       | 15.4 | 53.3                     |    | 53.3                    |    |
| LOS                              |                       | B    | E                        |    | E                       |    |
| OVERALL                          |                       | F    | E                        |    | F                       |    |

Table 10: PLOS Intersection Analysis – Terry Fox Drive/Edgewater Street/Charlie Rogers Place

| CRITERIA                         | North Approach        |      | South Approach        |    | East Approach         |    | West Approach         |      |
|----------------------------------|-----------------------|------|-----------------------|----|-----------------------|----|-----------------------|------|
| PETS I SCORE                     |                       |      |                       |    |                       |    |                       |      |
| CROSSING DISTANCE CONDITIONS     |                       |      |                       |    |                       |    |                       |      |
| Median > 2.4m in Width           | No                    | 23   | No                    | 39 | No                    | 23 | No                    | 39   |
| Lanes Crossed (3.5m Lane Width)  | 8                     |      | 7                     |    | 8                     |    | 7                     |      |
| SIGNAL PHASING AND TIMING        |                       |      |                       |    |                       |    |                       |      |
| Left Turn Conflict               | Permissive            | -8   | Permissive            | -8 | Perm + Prot           | -8 | Perm + Prot           | -8   |
| Right Turn Conflict              | Permissive or Yield   | -5   | Permissive or Yield   | -5 | Permissive or Yield   | -5 | Permissive or Yield   | -5   |
| Right Turn on Red                | RTOR Allowed          | -3   | RTOR Allowed          | -3 | RTOR Allowed          | -3 | RTOR Allowed          | -3   |
| Leading Pedestrian Interval      | No                    | -2   | No                    | -2 | No                    | -2 | No                    | -2   |
| CORNER RADIUS                    |                       |      |                       |    |                       |    |                       |      |
| Parallel Radius                  | > 15m to 25m          | -8   | > 10m to 15m          | -6 | > 10m to 15m          | -6 | > 10m to 15m          | -6   |
| Parallel Right Turn Channel      | No Right Turn Channel | -4   | No Right Turn Channel | -4 | No Right Turn Channel | -4 | No Right Turn Channel | -4   |
| Perpendicular Radius             | N/A                   | 0    | N/A                   | 0  | N/A                   | 0  | N/A                   | 0    |
| Perpendicular Right Turn Channel | N/A                   | 0    | N/A                   | 0  | N/A                   | 0  | N/A                   | 0    |
| CROSSING TREATMENT               |                       |      |                       |    |                       |    |                       |      |
| Treatment                        | Standard              | -7   | Standard              | -7 | Standard              | -7 | Standard              | -7   |
| PETS I SCORE                     |                       | -14  |                       |    | 4                     |    |                       | 4    |
| LOS                              |                       | F    |                       |    | F                     |    |                       | F    |
| DELAY SCORE                      |                       |      |                       |    |                       |    |                       |      |
| Cycle Length                     |                       | 120  |                       |    | 120                   |    |                       | 120  |
| Pedestrian Walk Time             |                       | 7.5  |                       |    | 7.5                   |    |                       | 41.5 |
| DELAY SCORE                      |                       | 52.7 |                       |    | 52.7                  |    |                       | 25.7 |
| LOS                              |                       | E    |                       |    | E                     |    |                       | C    |
| OVERALL                          |                       | F    |                       |    | F                     |    |                       | F    |

Table 11: PLOS Intersection Analysis – Terry Fox Drive/Tony Graham Rec Complex

| CRITERIA                         | North Approach        |      | South Approach        |    | East Approach         |    | West Approach         |      |
|----------------------------------|-----------------------|------|-----------------------|----|-----------------------|----|-----------------------|------|
| PETSİ SCORE                      |                       |      |                       |    |                       |    |                       |      |
| CROSSING DISTANCE CONDITIONS     |                       |      |                       |    |                       |    |                       |      |
| Median > 2.4m in Width           | No                    | 39   | No                    | 39 | No                    | 39 | No                    | 39   |
| Lanes Crossed (3.5m Lane Width)  | 7                     |      | 7                     |    | 7                     |    | 7                     |      |
| SIGNAL PHASING AND TIMING        |                       |      |                       |    |                       |    |                       |      |
| Left Turn Conflict               | Permissive            | -8   | Permissive            | -8 | Perm + Prot           | -8 | Perm + Prot           | -8   |
| Right Turn Conflict              | Permissive or Yield   | -5   | Permissive or Yield   | -5 | Permissive or Yield   | -5 | Permissive or Yield   | -5   |
| Right Turn on Red                | RTOR Allowed          | -3   | RTOR Allowed          | -3 | RTOR Allowed          | -3 | RTOR Allowed          | -3   |
| Leading Pedestrian Interval      | No                    | -2   | No                    | -2 | No                    | -2 | No                    | -2   |
| CORNER RADIUS                    |                       |      |                       |    |                       |    |                       |      |
| Parallel Radius                  | > 10m to 15m          | -6   | > 10m to 15m          | -6 | > 10m to 15m          | -6 | > 10m to 15m          | -6   |
| Parallel Right Turn Channel      | No Right Turn Channel | -4   | No Right Turn Channel | -4 | No Right Turn Channel | -4 | No Right Turn Channel | -4   |
| Perpendicular Radius             | N/A                   | 0    | N/A                   | 0  | N/A                   | 0  | N/A                   | 0    |
| Perpendicular Right Turn Channel | N/A                   | 0    | N/A                   | 0  | N/A                   | 0  | N/A                   | 0    |
| CROSSING TREATMENT               |                       |      |                       |    |                       |    |                       |      |
| Treatment                        | Standard              | -7   | Standard              | -7 | Standard              | -7 | Standard              | -7   |
| PETSİ SCORE                      |                       | 4    |                       |    | 4                     |    |                       | 4    |
| LOS                              |                       | F    |                       |    | F                     |    |                       | F    |
| DELAY SCORE                      |                       |      |                       |    |                       |    |                       |      |
| Cycle Length                     |                       | 120  |                       |    | 120                   |    |                       | 120  |
| Pedestrian Walk Time             |                       | 7.8  |                       |    | 7.8                   |    |                       | 46.5 |
| DELAY SCORE                      |                       | 52.5 |                       |    | 52.5                  |    |                       | 22.5 |
| LOS                              |                       | E    |                       |    | E                     |    |                       | C    |
| OVERALL                          |                       | F    |                       |    | F                     |    |                       | F    |

Table 12: PLOS Intersection Analysis – Terry Fox Drive/Sobey's Access

| CRITERIA                         | North Approach      |      | South Approach        |    | East Approach         |      | West Approach         |      |
|----------------------------------|---------------------|------|-----------------------|----|-----------------------|------|-----------------------|------|
| PETSİ SCORE                      |                     |      |                       |    |                       |      |                       |      |
| CROSSING DISTANCE CONDITIONS     |                     |      |                       |    |                       |      |                       |      |
| Median > 2.4m in Width           | No                  | -10  | No                    | 23 | No                    | 23   | No                    | 72   |
| Lanes Crossed (3.5m Lane Width)  | 10 +                |      | 8                     |    | 8                     |      | 5                     |      |
| SIGNAL PHASING AND TIMING        |                     |      |                       |    |                       |      |                       |      |
| Left Turn Conflict               | Permissive          | -8   | Permissive            | -8 | Permissive            | -8   | Perm + Prot           | -8   |
| Right Turn Conflict              | Permissive or Yield | -5   | Permissive or Yield   | -5 | Permissive or Yield   | -5   | Permissive or Yield   | -5   |
| Right Turn on Red                | RTOR Allowed        | -3   | RTOR Allowed          | -3 | N/A                   | 0    | RTOR Allowed          | -3   |
| Leading Pedestrian Interval      | Yes                 | 0    | Yes                   | 0  | No                    | -2   | No                    | -2   |
| CORNER RADIUS                    |                     |      |                       |    |                       |      |                       |      |
| Parallel Radius                  | > 10m to 15m        | -6   | > 5m to 10m           | -5 | > 10m to 15m          | -6   | > 10m to 15m          | -6   |
| Parallel Right Turn Channel      | Smart Channel       | 2    | No Right Turn Channel | -4 | No Right Turn Channel | -4   | No Right Turn Channel | -4   |
| Perpendicular Radius             | N/A                 | 0    | N/A                   | 0  | > 10m to 15m          | -6   | N/A                   | 0    |
| Perpendicular Right Turn Channel | N/A                 | 0    | N/A                   | 0  | Smart Channel         | 2    | N/A                   | 0    |
| CROSSING TREATMENT               |                     |      |                       |    |                       |      |                       |      |
| Treatment                        | Standard            | -7   | Standard              | -7 | Standard              | -7   | Standard              | -7   |
| PETSİ SCORE                      |                     | -37  |                       |    | -9                    |      |                       | 37   |
| LOS                              |                     | F    |                       |    | F                     |      |                       | E    |
| DELAY SCORE                      |                     |      |                       |    |                       |      |                       |      |
| Cycle Length                     |                     | 120  |                       |    | 120                   |      | 110                   | 110  |
| Pedestrian Walk Time             |                     | 7.0  |                       |    | 7.0                   |      | 53.0                  | 38.0 |
| DELAY SCORE                      |                     | 53.2 |                       |    | 53.2                  | 14.8 |                       | 23.6 |
| LOS                              |                     | E    |                       |    | E                     | B    |                       | C    |
| OVERALL                          |                     | F    |                       |    | F                     | F    |                       | E    |

Table 13: PLOS Intersection Analysis – Terry Fox Drive/Winchester Drive/Halkirk Avenue

| CRITERIA                         | North Approach        |      | South Approach        |     | East Approach         |      | West Approach         |      |
|----------------------------------|-----------------------|------|-----------------------|-----|-----------------------|------|-----------------------|------|
| PETSİ SCORE                      |                       |      |                       |     |                       |      |                       |      |
| CROSSING DISTANCE CONDITIONS     |                       |      |                       |     |                       |      |                       |      |
| Median > 2.4m in Width           | No                    | 23   | No                    | 23  | No                    | 55   | No                    | 55   |
| Lanes Crossed (3.5m Lane Width)  | 8                     |      | 8                     |     | 6                     |      | 6                     |      |
| SIGNAL PHASING AND TIMING        |                       |      |                       |     |                       |      |                       |      |
| Left Turn Conflict               | Permissive            | -8   | Permissive            | -8  | Permissive            | -8   | Permissive            | -8   |
| Right Turn Conflict              | Permissive or Yield   | -5   | Permissive or Yield   | -5  | Permissive or Yield   | -5   | Permissive or Yield   | -5   |
| Right Turn on Red                | RTOR Allowed          | -3   | RTOR Allowed          | -3  | RTOR Allowed          | -3   | RTOR Allowed          | -3   |
| Leading Pedestrian Interval      | No                    | -2   | No                    | -2  | No                    | -2   | No                    | -2   |
| CORNER RADIUS                    |                       |      |                       |     |                       |      |                       |      |
| Parallel Radius                  | > 10m to 15m          | -6   | > 10m to 15m          | -6  | > 10m to 15m          | -6   | > 10m to 15m          | -6   |
| Parallel Right Turn Channel      | No Right Turn Channel | -4   | No Right Turn Channel | -4  | No Right Turn Channel | -4   | No Right Turn Channel | -4   |
| Perpendicular Radius             | N/A                   | 0    | N/A                   | 0   | N/A                   | 0    | N/A                   | 0    |
| Perpendicular Right Turn Channel | N/A                   | 0    | N/A                   | 0   | N/A                   | 0    | N/A                   | 0    |
| CROSSING TREATMENT               |                       |      |                       |     |                       |      |                       |      |
| Treatment                        | Standard              | -7   | Standard              | -7  | Standard              | -7   | Standard              | -7   |
| PETSİ SCORE                      |                       | -12  |                       |     | -12                   | 20   |                       | 20   |
| LOS                              |                       | F    |                       |     | F                     | F    |                       | F    |
| DELAY SCORE                      |                       |      |                       |     |                       |      |                       |      |
| Cycle Length                     |                       | 120  |                       | 120 |                       | 110  |                       | 110  |
| Pedestrian Walk Time             |                       | 9.0  |                       | 9.0 |                       | 50.7 |                       | 50.7 |
| DELAY SCORE                      |                       | 51.3 | 51.3                  |     | 16.0                  |      | 16.0                  |      |
| LOS                              |                       | E    | E                     |     | B                     |      | B                     |      |
| OVERALL                          |                       | F    | F                     |     | F                     |      | F                     |      |

Table 14: BLOS Intersection Analysis

| Approach                                    | Facility Type      | Criteria                        | Travel Lanes and/or Speed                                                    | BLOS |
|---------------------------------------------|--------------------|---------------------------------|------------------------------------------------------------------------------|------|
| Hazeldean Road/325m East of Iber Road       |                    |                                 |                                                                              |      |
| North Approach                              | Mixed Traffic      | Right Turn Lane Characteristics | Right turn lane < 50m; turning speed ≤ 25 km/h                               | D    |
|                                             |                    | Left Turn Accommodation         | One lane crossed, 50 km/h                                                    | D    |
| East Approach                               | Pocket Bike Lane   | Right Turn Lane Characteristics | Bike lane shifts to the left of the right turn lane, turning speed ≤ 25 km/h | D    |
|                                             |                    | Left Turn Accommodation         | No left turn                                                                 | -    |
| West Approach                               | Curbside Bike Lane | Right Turn Lane Characteristics | No right turn                                                                | -    |
|                                             |                    | Left Turn Accommodation         | Two lanes crossed, ≥ 50 km/h                                                 | F    |
| Hazeldean Road/Roger Griffiths Avenue       |                    |                                 |                                                                              |      |
| North Approach                              | Mixed Traffic      | Right Turn Lane Characteristics | Right turn lane < 50m; turning speed ≤ 25 km/h                               | D    |
|                                             |                    | Left Turn Accommodation         | Dual left turn lanes                                                         | F    |
| East Approach                               | Pocket Bike Lane   | Right Turn Lane Characteristics | Bike lane shifts to the left of the right turn lane, turning speed ≤ 25 km/h | D    |
|                                             |                    | Left Turn Accommodation         | No left turn                                                                 | -    |
| West Approach                               | Curbside Bike Lane | Right Turn Lane Characteristics | No right turn                                                                | -    |
|                                             |                    | Left Turn Accommodation         | Two lanes crossed, ≥ 50 km/h                                                 | F    |
| Hazeldean Road/Mantra Street/Tillage Street |                    |                                 |                                                                              |      |
| North Approach                              | Mixed Traffic      | Right Turn Lane Characteristics | Shared through/right turn lane                                               | A    |
|                                             |                    | Left Turn Accommodation         | Dual left turn lanes                                                         | F    |
| South Approach                              | Mixed Traffic      | Right Turn Lane Characteristics | Shared through/right turn lane                                               | A    |
|                                             |                    | Left Turn Accommodation         | One lane crossed, ≥ 60 km/h                                                  | F    |
| East Approach                               | Cycle Track        | Right Turn Lane Characteristics | Cycling facility remains to the right                                        | A    |
|                                             |                    | Left Turn Accommodation         | Two-stage left turn bike box                                                 | A    |
| West Approach                               | Cycle Track        | Right Turn Lane Characteristics | Cycling facility remains to the right                                        | A    |
|                                             |                    | Left Turn Accommodation         | Two-stage left turn bike box                                                 | A    |

| Approach                                              | Facility Type      | Criteria                        | Travel Lanes and/or Speed                            | BLOS |
|-------------------------------------------------------|--------------------|---------------------------------|------------------------------------------------------|------|
| Hazeldean Road/Terry Fox Drive                        |                    |                                 |                                                      |      |
| North Approach                                        | Pocket Bike Lane   | Right Turn Lane Characteristics | Right turn lane is > 50m and introduced to the right | D    |
|                                                       |                    | Left Turn Accommodation         | Dual left turn lanes                                 | F    |
| South Approach                                        | Pocket Bike Lane   | Right Turn Lane Characteristics | Right turn lane is ≤ 50m and introduced to the right | B    |
|                                                       |                    | Left Turn Accommodation         | Dual left turn lanes                                 | F    |
| East Approach                                         | Pocket Bike Lane   | Right Turn Lane Characteristics | Right turn lane is > 50m and introduced to the right | D    |
|                                                       |                    | Left Turn Accommodation         | Dual left turn lanes                                 | F    |
| West Approach                                         | Pocket Bike Lane   | Right Turn Lane Characteristics | Right turn lane is > 50m and introduced to the right | D    |
|                                                       |                    | Left Turn Accommodation         | Dual left turn lanes                                 | F    |
| Hazeldean Road/Edgewater Street                       |                    |                                 |                                                      |      |
| North Approach                                        | Mixed Traffic      | Right Turn Lane Characteristics | Right turn lane > 50m                                | F    |
|                                                       |                    | Left Turn Accommodation         | One lane crossed, ≥ 60 km/h                          | F    |
| East Approach                                         | Mixed Traffic      | Right Turn Lane Characteristics | Shared through/right turn lane                       | A    |
|                                                       |                    | Left Turn Accommodation         | No left turn                                         | -    |
| West Approach                                         | Curbside Bike Lane | Right Turn Lane Characteristics | No right turn                                        | -    |
|                                                       |                    | Left Turn Accommodation         | Two lanes crossed, ≥ 50 km/h                         | F    |
| Terry Fox Drive/Edgewater Street/Charlie Rogers Place |                    |                                 |                                                      |      |
| North Approach                                        | Pocket Bike Lane   | Right Turn Lane Characteristics | Right turn lane is ≤ 50m and introduced to the right | B    |
|                                                       |                    | Left Turn Accommodation         | Two lanes crossed, ≥ 50 km/h                         | F    |
| South Approach                                        | Curbside Bike Lane | Right Turn Lane Characteristics | Shared through/right turn lane                       | A    |
|                                                       |                    | Left Turn Accommodation         | Two lanes crossed, ≥ 50 km/h                         | F    |
| East Approach                                         | Mixed Traffic      | Right Turn Lane Characteristics | Shared through/right turn lane                       | A    |
|                                                       |                    | Left Turn Accommodation         | One lane crossed, ≥ 60 km/h                          | F    |
| West Approach                                         | Mixed Traffic      | Right Turn Lane Characteristics | Shared through/right turn lane                       | A    |
|                                                       |                    | Left Turn Accommodation         | One lane crossed, 50 km/h                            | D    |



| Approach                                        | Facility Type      | Criteria                        | Travel Lanes and/or Speed                              | BLOS |
|-------------------------------------------------|--------------------|---------------------------------|--------------------------------------------------------|------|
| Terry Fox Drive/Tony Graham Rec Complex         |                    |                                 |                                                        |      |
| North Approach                                  | Curbside Bike Lane | Right Turn Lane Characteristics | Shared through/right turn lane                         | A    |
|                                                 |                    | Left Turn Accommodation         | Two lanes crossed, $\geq 50$ km/h                      | F    |
| South Approach                                  | Curbside Bike Lane | Right Turn Lane Characteristics | Shared through/right turn lane                         | A    |
|                                                 |                    | Left Turn Accommodation         | Two lanes crossed, $\geq 50$ km/h                      | F    |
| East Approach                                   | Mixed Traffic      | Right Turn Lane Characteristics | Shared through/right turn lane                         | A    |
|                                                 |                    | Left Turn Accommodation         | One lane crossed, $\leq 40$ km/h                       | B    |
| West Approach                                   | Mixed Traffic      | Right Turn Lane Characteristics | Shared through/right turn lane                         | A    |
|                                                 |                    | Left Turn Accommodation         | One lane crossed, 50 km/h                              | D    |
| Terry Fox Drive/Sobey's Access                  |                    |                                 |                                                        |      |
| North Approach                                  | Curbside Bike Lane | Right Turn Lane Characteristics | Shared through/right turn lane                         | A    |
|                                                 |                    | Left Turn Accommodation         | Two lanes crossed, $\geq 50$ km/h                      | F    |
| South Approach                                  | Curbside Bike Lane | Right Turn Lane Characteristics | Shared through/right turn lane                         | A    |
|                                                 |                    | Left Turn Accommodation         | Two lanes crossed, $\geq 50$ km/h                      | F    |
| East Approach                                   | Mixed Traffic      | Right Turn Lane Characteristics | Right turn lane < 50m;<br>turning speed $\leq 25$ km/h | D    |
|                                                 |                    | Left Turn Accommodation         | One lane crossed, $\leq 40$ km/h                       | B    |
| West Approach                                   | Mixed Traffic      | Right Turn Lane Characteristics | Shared left turn/through/right turn lane               | A    |
|                                                 |                    | Left Turn Accommodation         | No lanes crossed, $\leq 50$ km/h                       | B    |
| Terry Fox Drive/Winchester Drive/Halkirk Avenue |                    |                                 |                                                        |      |
| North Approach                                  | Pocket Bike Lane   | Right Turn Lane Characteristics | Right turn lane is > 50m and introduced to the right   | D    |
|                                                 |                    | Left Turn Accommodation         | Two lanes crossed, $\geq 50$ km/h                      | F    |
| South Approach                                  | Curbside Bike Lane | Right Turn Lane Characteristics | Shared through/right turn lane                         | A    |
|                                                 |                    | Left Turn Accommodation         | Two lanes crossed, $\geq 50$ km/h                      | F    |
| East Approach                                   | Mixed Traffic      | Right Turn Lane Characteristics | Shared through/right turn lane                         | A    |
|                                                 |                    | Left Turn Accommodation         | One lane crossed, 50 km/h                              | D    |
| West Approach                                   | Mixed Traffic      | Right Turn Lane Characteristics | Shared through/right turn lane                         | A    |
|                                                 |                    | Left Turn Accommodation         | One lane crossed, 50 km/h                              | D    |

Table 15: TLOS Intersection Analysis

| Approach                                              | Delay (sec) <sup>(1)</sup> |         | TLOS |
|-------------------------------------------------------|----------------------------|---------|------|
|                                                       | AM Peak                    | PM Peak |      |
| Hazeldean Road/325m East of Iber Road                 |                            |         |      |
| East Approach                                         | 1.3                        | 1.7     | B    |
| West Approach                                         | 3.7                        | 5.9     | B    |
| Hazeldean Road/Roger Griffiths Avenue                 |                            |         |      |
| East Approach                                         | 5.3                        | 5.1     | B    |
| West Approach                                         | 1.8                        | 5.8     | B    |
| Hazeldean Road/Mantra Street/Tillage Street           |                            |         |      |
| East Approach                                         | 12.2                       | 34.8    | E    |
| West Approach                                         | 15.7                       | 18.0    | C    |
| Hazeldean Road/Terry Fox Drive                        |                            |         |      |
| North Approach                                        | 24.0                       | 50.2    | F    |
| South Approach                                        | 28.3                       | 46.4    | F    |
| East Approach                                         | 36.5                       | 52.8    | F    |
| West Approach                                         | 40.7                       | 54.0    | F    |
| Hazeldean Road/Edgewater Street                       |                            |         |      |
| East Approach                                         | 4.7                        | 8.7     | B    |
| West Approach                                         | 10.6                       | 15.1    | C    |
| Terry Fox Drive/Edgewater Street/Charlie Rogers Place |                            |         |      |
| North Approach                                        | 11.0                       | 11.3    | C    |
| South Approach                                        | 8.3                        | 8.9     | B    |
| Terry Fox Drive/Tony Graham Rec Complex               |                            |         |      |
| North Approach                                        | 0.3                        | 6.3     | B    |
| South Approach                                        | 8.5                        | 2.5     | B    |
| Terry Fox Drive/Sobey's Access                        |                            |         |      |
| North Approach                                        | 2.9                        | 4.0     | B    |
| South Approach                                        | 4.2                        | 6.3     | B    |
| Terry Fox Drive/Winchester Drive/Halkirk Avenue       |                            |         |      |
| North Approach                                        | 8.6                        | 11.8    | C    |
| South Approach                                        | 6.8                        | 5.4     | B    |

1. Delay based on outputs from Synchro analysis of existing conditions

Table 16: TkLOS Intersection Analysis

| Approach                                                     | Effective Corner Radius | Number of Receiving Lanes<br>Departing Intersection | TkLOS |
|--------------------------------------------------------------|-------------------------|-----------------------------------------------------|-------|
| <b>Hazeldean Road/325m East of Iber Road</b>                 |                         |                                                     |       |
| North Approach                                               | > 15m                   | 2                                                   | A     |
| East Approach                                                | > 15m                   | 1                                                   | C     |
| <b>Hazeldean Road/Roger Griffiths Avenue</b>                 |                         |                                                     |       |
| North Approach                                               | 10m to 15m              | 2                                                   | B     |
| East Approach                                                | > 15m                   | 1                                                   | C     |
| <b>Hazeldean Road/Mantra Street/Tillage Street</b>           |                         |                                                     |       |
| North Approach                                               | 10m to 15m              | 2                                                   | B     |
| South Approach                                               | 10m to 15m              | 2                                                   | B     |
| East Approach                                                | > 15m                   | 1                                                   | C     |
| West Approach                                                | < 10m                   | 1                                                   | F     |
| <b>Hazeldean Road/Terry Fox Drive</b>                        |                         |                                                     |       |
| North Approach                                               | > 15m                   | 2                                                   | A     |
| South Approach                                               | > 15m                   | 2                                                   | A     |
| East Approach                                                | > 15m                   | 3                                                   | A     |
| West Approach                                                | > 15m                   | 2                                                   | A     |
| <b>Hazeldean Road/Edgewater Street</b>                       |                         |                                                     |       |
| North Approach                                               | 10m to 15m              | 2                                                   | B     |
| East Approach                                                | > 15m                   | 1                                                   | C     |
| <b>Terry Fox Drive/Edgewater Street/Charlie Rogers Place</b> |                         |                                                     |       |
| North Approach                                               | 10m to 15m              | 1                                                   | E     |
| South Approach                                               | 10m to 15m              | 2                                                   | B     |
| East Approach                                                | 10m to 15m              | 2                                                   | B     |
| West Approach                                                | 10m to 15m              | 2                                                   | B     |
| <b>Terry Fox Drive/Tony Graham Rec Complex</b>               |                         |                                                     |       |
| North Approach                                               | 10m to 15m              | 1                                                   | E     |
| South Approach                                               | < 10m                   | 1                                                   | F     |
| East Approach                                                | 10m to 15m              | 2                                                   | B     |
| West Approach                                                | 10m to 15m              | 2                                                   | B     |
| <b>Terry Fox Drive/Sobey's Access</b>                        |                         |                                                     |       |
| North Approach                                               | 10m to 15m              | 1                                                   | E     |
| South Approach                                               | 10m to 15m              | 1                                                   | E     |
| East Approach                                                | 10m to 15m              | 3                                                   | B     |
| West Approach                                                | < 10m                   | 2                                                   | D     |
| <b>Terry Fox Drive/Winchester Drive/Halkirk Avenue</b>       |                         |                                                     |       |
| North Approach                                               | 10m to 15m              | 1                                                   | E     |
| South Approach                                               | 10m to 15m              | 1                                                   | E     |
| East Approach                                                | 10m to 15m              | 2                                                   | B     |
| West Approach                                                | 10m to 15m              | 2                                                   | B     |

## **APPENDIX L**

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### Transportation Demand Management

**TDM Measures Checklist:**  
*Residential Developments (multi-family, condominium or subdivision)*

| <b>Legend</b> |                                                                                                                |
|---------------|----------------------------------------------------------------------------------------------------------------|
| <b>BASIC</b>  | The measure is generally feasible and effective, and in most cases would benefit the development and its users |
| <b>BETTER</b> | The measure could maximize support for users of sustainable modes, and optimize development performance        |
| <b>★</b>      | The measure is one of the most dependably effective tools to encourage the use of sustainable modes            |

| <b>TDM measures: Residential developments</b>                       |                                                                                                                                               | <b>Check if proposed &amp; add descriptions</b> |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| <b>1. TDM PROGRAM MANAGEMENT</b>                                    |                                                                                                                                               |                                                 |
| <b>1.1 Program coordinator</b>                                      |                                                                                                                                               |                                                 |
| <b>BASIC</b> ★                                                      | 1.1.1 Designate an internal coordinator, or contract with an external coordinator                                                             | <input type="checkbox"/>                        |
| <b>1.2 Travel surveys</b>                                           |                                                                                                                                               |                                                 |
| <b>BETTER</b>                                                       | 1.2.1 Conduct periodic surveys to identify travel-related behaviours, attitudes, challenges and solutions, and to track progress              | <input type="checkbox"/>                        |
| <b>2. WALKING AND CYCLING</b>                                       |                                                                                                                                               |                                                 |
| <b>2.1 Information on walking/cycling routes &amp; destinations</b> |                                                                                                                                               |                                                 |
| <b>BASIC</b>                                                        | 2.1.1 Display local area maps with walking/cycling access routes and key destinations at major entrances ( <i>multi-family, condominium</i> ) | <input checked="" type="checkbox"/>             |
| <b>2.2 Bicycle skills training</b>                                  |                                                                                                                                               |                                                 |
| <b>BETTER</b>                                                       | 2.2.1 Offer on-site cycling courses for residents, or subsidize off-site courses                                                              | <input type="checkbox"/>                        |

| TDM measures: <i>Residential developments</i>   |                                                                                                                                                  | Check if proposed & add descriptions |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| <b>3. TRANSIT</b>                               |                                                                                                                                                  |                                      |
| <b>3.1 Transit information</b>                  |                                                                                                                                                  |                                      |
| BASIC                                           | 3.1.1 Display relevant transit schedules and route maps at entrances ( <i>multi-family, condominium</i> )                                        | <input checked="" type="checkbox"/>  |
| BETTER                                          | 3.1.2 Provide real-time arrival information display at entrances ( <i>multi-family, condominium</i> )                                            | <input type="checkbox"/>             |
| <b>3.2 Transit fare incentives</b>              |                                                                                                                                                  |                                      |
| BASIC ★                                         | 3.2.1 Offer PRESTO cards preloaded with one monthly transit pass on residence purchase/move-in, to encourage residents to use transit            | <input type="checkbox"/>             |
| BETTER                                          | 3.2.2 Offer at least one year of free monthly transit passes on residence purchase/move-in                                                       | <input type="checkbox"/>             |
| <b>3.3 Enhanced public transit service</b>      |                                                                                                                                                  |                                      |
| BETTER ★                                        | 3.3.1 Contract with OC Transpo to provide early transit services until regular services are warranted by occupancy levels ( <i>subdivision</i> ) | <input type="checkbox"/>             |
| <b>3.4 Private transit service</b>              |                                                                                                                                                  |                                      |
| BETTER                                          | 3.4.1 Provide shuttle service for seniors homes or lifestyle communities (e.g. scheduled mall or supermarket runs)                               | <input type="checkbox"/>             |
| <b>4. CARSHARING &amp; BIKESHARING</b>          |                                                                                                                                                  |                                      |
| <b>4.1 Bikeshare stations &amp; memberships</b> |                                                                                                                                                  |                                      |
| BETTER                                          | 4.1.1 Contract with provider to install on-site bikeshare station ( <i>multi-family</i> )                                                        | <input type="checkbox"/>             |
| BETTER                                          | 4.1.2 Provide residents with bikeshare memberships, either free or subsidized ( <i>multi-family</i> )                                            | <input type="checkbox"/>             |
| <b>4.2 Carshare vehicles &amp; memberships</b>  |                                                                                                                                                  |                                      |
| BETTER                                          | 4.2.1 Contract with provider to install on-site carshare vehicles and promote their use by residents                                             | <input type="checkbox"/>             |
| BETTER                                          | 4.2.2 Provide residents with carshare memberships, either free or subsidized                                                                     | <input type="checkbox"/>             |
| <b>5. PARKING</b>                               |                                                                                                                                                  |                                      |
| <b>5.1 Priced parking</b>                       |                                                                                                                                                  |                                      |
| BASIC ★                                         | 5.1.1 Unbundle parking cost from purchase price ( <i>condominium</i> )                                                                           | <input type="checkbox"/>             |
| BASIC ★                                         | 5.1.2 Unbundle parking cost from monthly rent ( <i>multi-family</i> )                                                                            | <input type="checkbox"/>             |

| TDM measures: <i>Residential developments</i> |                                                                                 | Check if proposed & add descriptions |
|-----------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------|
| <b>6. TDM MARKETING &amp; COMMUNICATIONS</b>  |                                                                                 |                                      |
| <b>6.1 Multimodal travel information</b>      |                                                                                 |                                      |
| <b>BASIC</b>                                  | ★ 6.1.1 Provide a multimodal travel option information package to new residents | <input checked="" type="checkbox"/>  |
| <b>6.2 Personalized trip planning</b>         |                                                                                 |                                      |
| <b>BETTER</b>                                 | ★ 6.2.1 Offer personalized trip planning to new residents                       | <input type="checkbox"/>             |

## **APPENDIX M**

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Total Synchro Analysis



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |   |  |  |  |  |  |
| Traffic Volume (vph)       | 3                                                                                 | 320                                                                               | 1020                                                                              | 10                                                                                | 1                                                                                 | 68                                                                                | 664                                                                                 | 55                                                                                  | 19                                                                                  | 442                                                                                 | 154                                                                                 | 23                                                                                  |
| Future Volume (vph)        | 3                                                                                 | 320                                                                               | 1020                                                                              | 10                                                                                | 1                                                                                 | 68                                                                                | 664                                                                                 | 55                                                                                  | 19                                                                                  | 442                                                                                 | 154                                                                                 | 23                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                     |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.999                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3399                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3370                                                                                | 1551                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3419                                                                              | 3399                                                                              | 0                                                                                 | 0                                                                                 | 3391                                                                              | 3370                                                                                | 1525                                                                                | 1745                                                                                | 3502                                                                                | 1540                                                                                | 3415                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 145                                                                                 |                                                                                     |                                                                                     | 154                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                               |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                                |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 5%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 6%                                                                                  | 3%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 320                                                                               | 1020                                                                              | 10                                                                                | 1                                                                                 | 68                                                                                | 664                                                                                 | 55                                                                                  | 19                                                                                  | 442                                                                                 | 154                                                                                 | 23                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 323                                                                               | 1030                                                                              | 0                                                                                 | 0                                                                                 | 69                                                                                | 664                                                                                 | 55                                                                                  | 19                                                                                  | 442                                                                                 | 154                                                                                 | 23                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | CI+Ex                                                                             | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                             | CI+Ex                                                                             | CI+Ex                                                                               | CI+Ex                                                                               | CI+Ex                                                                               | CI+Ex                                                                               | CI+Ex                                                                               | CI+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | CI+Ex                                                                               |                                                                                     |                                                                                     | CI+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |

|                            |                                                                                    |                                                                                    |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lane Group                 | SBT                                                                                                                                                                 | SBR                                                                                                                                                                 |
| Lane Configurations        |   |   |
| Traffic Volume (vph)       | 221                                                                                                                                                                 | 130                                                                                                                                                                 |
| Future Volume (vph)        | 221                                                                                                                                                                 | 130                                                                                                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                                                                                                                | 1800                                                                                                                                                                |
| Storage Length (m)         |                                                                                                                                                                     | 60.0                                                                                                                                                                |
| Storage Lanes              |                                                                                                                                                                     | 1                                                                                                                                                                   |
| Taper Length (m)           |                                                                                                                                                                     |                                                                                                                                                                     |
| Lane Util. Factor          | 0.95                                                                                                                                                                | 1.00                                                                                                                                                                |
| Ped Bike Factor            |                                                                                                                                                                     | 0.98                                                                                                                                                                |
| Frt                        |                                                                                                                                                                     | 0.850                                                                                                                                                               |
| Flt Protected              |                                                                                                                                                                     |                                                                                                                                                                     |
| Satd. Flow (prot)          | 3502                                                                                                                                                                | 1582                                                                                                                                                                |
| Flt Permitted              |                                                                                                                                                                     |                                                                                                                                                                     |
| Satd. Flow (perm)          | 3502                                                                                                                                                                | 1556                                                                                                                                                                |
| Right Turn on Red          |                                                                                                                                                                     | Yes                                                                                                                                                                 |
| Satd. Flow (RTOR)          |                                                                                                                                                                     | 145                                                                                                                                                                 |
| Link Speed (k/h)           | 50                                                                                                                                                                  |                                                                                                                                                                     |
| Link Distance (m)          | 251.2                                                                                                                                                               |                                                                                                                                                                     |
| Travel Time (s)            | 18.1                                                                                                                                                                |                                                                                                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                                                                                                     | 5                                                                                                                                                                   |
| Peak Hour Factor           | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                |
| Heavy Vehicles (%)         | 2%                                                                                                                                                                  | 1%                                                                                                                                                                  |
| Adj. Flow (vph)            | 221                                                                                                                                                                 | 130                                                                                                                                                                 |
| Shared Lane Traffic (%)    |                                                                                                                                                                     |                                                                                                                                                                     |
| Lane Group Flow (vph)      | 221                                                                                                                                                                 | 130                                                                                                                                                                 |
| Enter Blocked Intersection | No                                                                                                                                                                  | No                                                                                                                                                                  |
| Lane Alignment             | Left                                                                                                                                                                | R NA                                                                                                                                                                |
| Median Width(m)            | 10.0                                                                                                                                                                |                                                                                                                                                                     |
| Link Offset(m)             | 0.0                                                                                                                                                                 |                                                                                                                                                                     |
| Crosswalk Width(m)         | 5.0                                                                                                                                                                 |                                                                                                                                                                     |
| Two way Left Turn Lane     |                                                                                                                                                                     |                                                                                                                                                                     |
| Headway Factor             | 1.01                                                                                                                                                                | 1.01                                                                                                                                                                |
| Number of Detectors        | 2                                                                                                                                                                   | 1                                                                                                                                                                   |
| Detector Template          | Thru                                                                                                                                                                | Right                                                                                                                                                               |
| Leading Detector (m)       | 10.0                                                                                                                                                                | 2.0                                                                                                                                                                 |
| Trailing Detector (m)      | 0.0                                                                                                                                                                 | 0.0                                                                                                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                                                                                                                 | 0.0                                                                                                                                                                 |
| Detector 1 Size(m)         | 0.6                                                                                                                                                                 | 2.0                                                                                                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                                                                                                               | Cl+Ex                                                                                                                                                               |
| Detector 1 Channel         |                                                                                                                                                                     |                                                                                                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                                                                                                                 | 0.0                                                                                                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                                                                                                                 | 0.0                                                                                                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                                                                                                                 | 0.0                                                                                                                                                                 |
| Detector 2 Position(m)     | 9.4                                                                                                                                                                 |                                                                                                                                                                     |
| Detector 2 Size(m)         | 0.6                                                                                                                                                                 |                                                                                                                                                                     |
| Detector 2 Type            | Cl+Ex                                                                                                                                                               |                                                                                                                                                                     |
| Detector 2 Channel         |                                                                                                                                                                     |                                                                                                                                                                     |
| Detector 2 Extend (s)      | 0.0                                                                                                                                                                 |                                                                                                                                                                     |
| Turn Type                  | NA                                                                                                                                                                  | Perm                                                                                                                                                                |
| Protected Phases           | 4                                                                                                                                                                   |                                                                                                                                                                     |
| Permitted Phases           |                                                                                                                                                                     | 4                                                                                                                                                                   |
| Detector Phase             | 4                                                                                                                                                                   | 4                                                                                                                                                                   |
| Switch Phase               |                                                                                                                                                                     |                                                                                                                                                                     |
| Minimum Initial (s)        | 10.0                                                                                                                                                                | 10.0                                                                                                                                                                |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                               | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 49.0                                                                              |                                                                                   | 12.0                                                                              | 12.0                                                                              | 45.0                                                                               | 45.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 13.9%                                                                             | 13.9%                                                                             | 42.6%                                                                             |                                                                                   | 10.4%                                                                             | 10.4%                                                                             | 39.1%                                                                              | 39.1%                                                                               | 10.4%                                                                               | 36.5%                                                                               | 36.5%                                                                               | 10.4%                                                                               |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 42.9                                                                              |                                                                                   | 5.9                                                                               | 5.9                                                                               | 38.9                                                                               | 38.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                              | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                               | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 17.4                                                                              | 62.6                                                                              |                                                                                   |                                                                                   | 7.1                                                                               | 50.0                                                                               | 50.0                                                                                | 5.8                                                                                 | 22.1                                                                                | 22.1                                                                                | 5.8                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.15                                                                              | 0.54                                                                              |                                                                                   |                                                                                   | 0.06                                                                              | 0.43                                                                               | 0.43                                                                                | 0.05                                                                                | 0.19                                                                                | 0.19                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.62                                                                              | 0.56                                                                              |                                                                                   |                                                                                   | 0.33                                                                              | 0.45                                                                               | 0.07                                                                                | 0.22                                                                                | 0.66                                                                                | 0.37                                                                                | 0.13                                                                                |
| Control Delay           |                                                                                   | 52.6                                                                              | 22.2                                                                              |                                                                                   |                                                                                   | 79.6                                                                              | 9.9                                                                                | 0.5                                                                                 | 58.4                                                                                | 47.0                                                                                | 7.7                                                                                 | 54.0                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 52.6                                                                              | 22.2                                                                              |                                                                                   |                                                                                   | 79.6                                                                              | 9.9                                                                                | 0.5                                                                                 | 58.4                                                                                | 47.0                                                                                | 7.7                                                                                 | 54.0                                                                                |
| LOS                     |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 | A                                                                                  | A                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   | D                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 29.4                                                                              |                                                                                   |                                                                                   |                                                                                   | 15.3                                                                               |                                                                                     |                                                                                     | 37.5                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   | B                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 32.3                                                                              | 78.4                                                                              |                                                                                   |                                                                                   | 7.8                                                                               | 57.5                                                                               | 0.3                                                                                 | 3.9                                                                                 | 46.1                                                                                | 0.0                                                                                 | 2.4                                                                                 |
| Queue Length 95th (m)   |                                                                                   | #61.8                                                                             | 124.2                                                                             |                                                                                   |                                                                                   | 15.2                                                                              | 8.6                                                                                | 0.0                                                                                 | 11.0                                                                                | 51.7                                                                                | 13.3                                                                                | 6.2                                                                                 |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                              |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                    | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 517                                                                               | 1851                                                                              |                                                                                   |                                                                                   | 211                                                                               | 1466                                                                               | 745                                                                                 | 89                                                                                  | 1093                                                                                | 586                                                                                 | 176                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.62                                                                              | 0.56                                                                              |                                                                                   |                                                                                   | 0.33                                                                              | 0.45                                                                               | 0.07                                                                                | 0.21                                                                                | 0.40                                                                                | 0.26                                                                                | 0.13                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 19 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 27.2

Intersection LOS: C

Intersection Capacity Utilization 75.5%

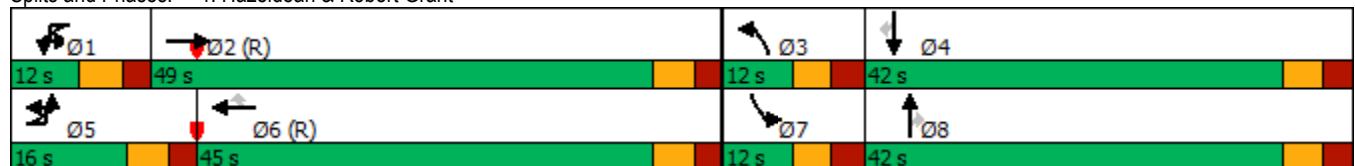
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Hazeldean & Robert Grant





| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Minimum Split (s)       | 41.1  | 41.1  |
| Total Split (s)         | 42.0  | 42.0  |
| Total Split (%)         | 36.5% | 36.5% |
| Maximum Green (s)       | 35.9  | 35.9  |
| Yellow Time (s)         | 3.3   | 3.3   |
| All-Red Time (s)        | 2.8   | 2.8   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.1   | 6.1   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 28.0  | 28.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 24.5  | 24.5  |
| Actuated g/C Ratio      | 0.21  | 0.21  |
| v/c Ratio               | 0.30  | 0.29  |
| Control Delay           | 37.7  | 5.7   |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 37.7  | 5.7   |
| LOS                     | D     | A     |
| Approach Delay          | 27.6  |       |
| Approach LOS            | C     |       |
| Queue Length 50th (m)   | 18.6  | 0.0   |
| Queue Length 95th (m)   | 26.8  | 10.1  |
| Internal Link Dist (m)  | 227.2 |       |
| Turn Bay Length (m)     |       | 60.0  |
| Base Capacity (vph)     | 1093  | 585   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.20  | 0.22  |
| Intersection Summary    |       |       |

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 1                                                                                 | 107                                                                               | 954                                                                               | 41                                                                                | 17                                                                                | 776                                                                               | 47                                                                                  | 29                                                                                  | 0                                                                                   | 26                                                                                  | 28                                                                                  | 0                                                                                   |
| Future Volume (vph)        | 1                                                                                 | 107                                                                               | 954                                                                               | 41                                                                                | 17                                                                                | 776                                                                               | 47                                                                                  | 29                                                                                  | 0                                                                                   | 26                                                                                  | 28                                                                                  | 0                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 75.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 180.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 75.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   | 0.97                                                                                | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   | 0.994                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                               |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1768                                                                              | 3412                                                                              | 0                                                                                 | 1751                                                                              | 3402                                                                              | 1567                                                                                | 1751                                                                                | 1537                                                                                | 0                                                                                   | 1768                                                                                | 1843                                                                                |
| Flt Permitted              |                                                                                   | 0.312                                                                             |                                                                                   |                                                                                   | 0.288                                                                             |                                                                                   |                                                                                     | 0.757                                                                               |                                                                                     |                                                                                     | 0.740                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 579                                                                               | 3412                                                                              | 0                                                                                 | 529                                                                               | 3402                                                                              | 1518                                                                                | 1386                                                                                | 1537                                                                                | 0                                                                                   | 1368                                                                                | 1843                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   |                                                                                   | 89                                                                                  |                                                                                     | 159                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |
| Link Distance (m)          |                                                                                   |                                                                                   | 297.5                                                                             |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                     |                                                                                     | 259.5                                                                               |                                                                                     |                                                                                     | 237.4                                                                               |
| Travel Time (s)            |                                                                                   |                                                                                   | 17.9                                                                              |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                     |                                                                                     | 18.7                                                                                |                                                                                     |                                                                                     | 17.1                                                                                |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 4%                                                                                | 2%                                                                                | 2%                                                                                | 5%                                                                                | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  | 2%                                                                                  |
| Adj. Flow (vph)            | 1                                                                                 | 107                                                                               | 954                                                                               | 41                                                                                | 17                                                                                | 776                                                                               | 47                                                                                  | 29                                                                                  | 0                                                                                   | 26                                                                                  | 28                                                                                  | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 108                                                                               | 995                                                                               | 0                                                                                 | 17                                                                                | 776                                                                               | 47                                                                                  | 29                                                                                  | 26                                                                                  | 0                                                                                   | 28                                                                                  | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                               | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | CI+Ex                                                                             | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                             | CI+Ex                                                                             | CI+Ex                                                                               | CI+Ex                                                                               | CI+Ex                                                                               |                                                                                     | CI+Ex                                                                               | CI+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                   | CI+Ex                                                                             |                                                                                     |                                                                                     | CI+Ex                                                                               |                                                                                     |                                                                                     | CI+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | pm+pt                                                                             | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                                | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                |                                                                                     |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |
| Permitted Phases           | 2                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                   | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 | 6                                                                                   | 8                                                                                   | 8                                                                                   |                                                                                     | 4                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | 7     |
| Traffic Volume (vph)       | 17    |
| Future Volume (vph)        | 17    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 40.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.98  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1552  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 297   |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 17    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 17    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 4     |
| Detector Phase             | 4     |
| Switch Phase               |       |
| Minimum Initial (s)        | 10.0  |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Split (s)       | 11.2                                                                              | 11.2                                                                              | 31.3                                                                              |                                                                                   | 31.3                                                                              | 31.3                                                                              | 31.3                                                                               | 31.2                                                                                | 31.2                                                                                |                                                                                     | 31.2                                                                                | 31.2                                                                                |
| Total Split (s)         | 20.0                                                                              | 20.0                                                                              | 82.0                                                                              |                                                                                   | 62.0                                                                              | 62.0                                                                              | 62.0                                                                               | 33.0                                                                                | 33.0                                                                                |                                                                                     | 33.0                                                                                | 33.0                                                                                |
| Total Split (%)         | 17.4%                                                                             | 17.4%                                                                             | 71.3%                                                                             |                                                                                   | 53.9%                                                                             | 53.9%                                                                             | 53.9%                                                                              | 28.7%                                                                               | 28.7%                                                                               |                                                                                     | 28.7%                                                                               | 28.7%                                                                               |
| Maximum Green (s)       | 13.8                                                                              | 13.8                                                                              | 75.7                                                                              |                                                                                   | 55.7                                                                              | 55.7                                                                              | 55.7                                                                               | 26.8                                                                                | 26.8                                                                                |                                                                                     | 26.8                                                                                | 26.8                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.3                                                                                 | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.5                                                                               | 2.5                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                               | 2.6                                                                               | 2.6                                                                                | 2.9                                                                                 | 2.9                                                                                 |                                                                                     | 2.9                                                                                 | 2.9                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.2                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               | 6.3                                                                                | 6.2                                                                                 | 6.2                                                                                 |                                                                                     | 6.2                                                                                 | 6.2                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               | Lag                                                                               | Lag                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | C-Max                                                                             | C-Max                                                                             | C-Max                                                                              | None                                                                                | None                                                                                |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   | 18.0                                                                              | 18.0                                                                              | 18.0                                                                               | 18.0                                                                                | 18.0                                                                                |                                                                                     | 18.0                                                                                | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 92.8                                                                              | 94.0                                                                              |                                                                                   | 79.3                                                                              | 79.3                                                                              | 79.3                                                                               | 13.0                                                                                | 13.0                                                                                |                                                                                     | 13.0                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.81                                                                              | 0.82                                                                              |                                                                                   | 0.69                                                                              | 0.69                                                                              | 0.69                                                                               | 0.11                                                                                | 0.11                                                                                |                                                                                     | 0.11                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.20                                                                              | 0.36                                                                              |                                                                                   | 0.05                                                                              | 0.33                                                                              | 0.04                                                                               | 0.19                                                                                | 0.08                                                                                |                                                                                     | 0.18                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 4.4                                                                               | 3.7                                                                               |                                                                                   | 6.2                                                                               | 9.6                                                                               | 2.3                                                                                | 46.4                                                                                | 0.5                                                                                 |                                                                                     | 46.4                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 4.4                                                                               | 3.7                                                                               |                                                                                   | 6.2                                                                               | 9.6                                                                               | 2.3                                                                                | 46.4                                                                                | 0.5                                                                                 |                                                                                     | 46.4                                                                                |                                                                                     |
| LOS                     |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   | A                                                                                 | A                                                                                 | A                                                                                  | D                                                                                   | A                                                                                   |                                                                                     | D                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 3.8                                                                               |                                                                                   |                                                                                   | 9.2                                                                               |                                                                                    |                                                                                     | 24.7                                                                                |                                                                                     |                                                                                     | 28.9                                                                                |
| Approach LOS            |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                    |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 2.7                                                                               | 13.6                                                                              |                                                                                   | 1.6                                                                               | 53.6                                                                              | 1.6                                                                                | 5.7                                                                                 | 0.0                                                                                 |                                                                                     | 5.5                                                                                 |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | 11.3                                                                              | 38.4                                                                              |                                                                                   | m4.8                                                                              | 93.8                                                                              | 4.2                                                                                | 12.2                                                                                | 0.0                                                                                 |                                                                                     | 11.9                                                                                |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 273.5                                                                             |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                    |                                                                                     | 235.5                                                                               |                                                                                     |                                                                                     | 213.4                                                                               |
| Turn Bay Length (m)     |                                                                                   | 75.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 180.0                                                                              |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 609                                                                               | 2790                                                                              |                                                                                   | 364                                                                               | 2346                                                                              | 1074                                                                               | 322                                                                                 | 480                                                                                 |                                                                                     | 318                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.18                                                                              | 0.36                                                                              |                                                                                   | 0.05                                                                              | 0.33                                                                              | 0.04                                                                               | 0.09                                                                                | 0.05                                                                                |                                                                                     | 0.09                                                                                |                                                                                     |

#### Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 10 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.36

Intersection Signal Delay: 7.1

Intersection LOS: A

Intersection Capacity Utilization 68.3%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Hazeldean & Roger Griffiths



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Split (s)       | 31.2  |
| Total Split (s)         | 33.0  |
| Total Split (%)         | 28.7% |
| Maximum Green (s)       | 26.8  |
| Yellow Time (s)         | 3.3   |
| All-Red Time (s)        | 2.9   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.2   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | None  |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 18.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 13.0  |
| Actuated g/C Ratio      | 0.11  |
| v/c Ratio               | 0.04  |
| Control Delay           | 0.2   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.2   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.0   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 40.0  |
| Base Capacity (vph)     | 589   |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.03  |
| Intersection Summary    |       |



3: Mantra/Tillage & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2029 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |  |
| Traffic Volume (vph)       | 45                                                                                | 916                                                                               | 16                                                                                | 31                                                                                | 710                                                                               | 113                                                                               | 33                                                                                 | 0                                                                                   | 114                                                                                 | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Future Volume (vph)        | 45                                                                                | 916                                                                               | 16                                                                                | 31                                                                                | 710                                                                               | 113                                                                               | 33                                                                                 | 0                                                                                   | 114                                                                                 | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 80.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 105.0                                                                             | 55.0                                                                               |                                                                                     | 0.0                                                                                 | 35.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 2                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)           | 60.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                               |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 0.97                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   | 0.97                                                                              | 0.99                                                                               | 0.98                                                                                |                                                                                     | 0.99                                                                                | 0.98                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.858                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 3448                                                                              | 0                                                                                 | 1768                                                                              | 3537                                                                              | 1551                                                                              | 1768                                                                               | 1522                                                                                | 0                                                                                   | 3332                                                                                | 1569                                                                                | 0                                                                                   |
| Flt Permitted              | 0.329                                                                             |                                                                                   |                                                                                   | 0.252                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 611                                                                               | 3448                                                                              | 0                                                                                 | 468                                                                               | 3537                                                                              | 1503                                                                              | 1757                                                                               | 1522                                                                                | 0                                                                                   | 3299                                                                                | 1569                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   | 153                                                                               |                                                                                    | 333                                                                                 |                                                                                     |                                                                                     | 36                                                                                  |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                    | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                   | 150.7                                                                             |                                                                                   |                                                                                    | 289.2                                                                               |                                                                                     |                                                                                     | 233.8                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   |                                                                                    | 20.8                                                                                |                                                                                     |                                                                                     | 16.8                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 16%                                                                               | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                 | 1%                                                                                  | 3%                                                                                  | 4%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 45                                                                                | 916                                                                               | 16                                                                                | 31                                                                                | 710                                                                               | 113                                                                               | 33                                                                                 | 0                                                                                   | 114                                                                                 | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 45                                                                                | 932                                                                               | 0                                                                                 | 31                                                                                | 710                                                                               | 113                                                                               | 33                                                                                 | 114                                                                                 | 0                                                                                   | 74                                                                                  | 38                                                                                  | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | R NA                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |                                                                                     |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |                                                                                     |
| Detector 1 Type            | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                             | CI+Ex                                                                             | CI+Ex                                                                             | CI+Ex                                                                              | CI+Ex                                                                               |                                                                                     | CI+Ex                                                                               | CI+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                    | CI+Ex                                                                               |                                                                                     |                                                                                     | CI+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                | Perm                                                                              | Prot                                                                               | NA                                                                                  |                                                                                     | Prot                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 3                                                                                  | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector Phase             | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 | 6                                                                                 | 3                                                                                  | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                                | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 10.0                                                                                |                                                                                     |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 31.3                                                                              |                                                                                   | 11.1                                                                              | 31.3                                                                              | 31.3                                                                              | 11.5                                                                               | 31.5                                                                                |                                                                                     | 11.5                                                                                | 31.5                                                                                |                                                                                     |
| Total Split (s)         | 12.0                                                                              | 43.0                                                                              |                                                                                   | 12.0                                                                              | 43.0                                                                              | 43.0                                                                              | 28.0                                                                               | 32.0                                                                                |                                                                                     | 28.0                                                                                | 32.0                                                                                |                                                                                     |
| Total Split (%)         | 10.4%                                                                             | 37.4%                                                                             |                                                                                   | 10.4%                                                                             | 37.4%                                                                             | 37.4%                                                                             | 24.3%                                                                              | 27.8%                                                                               |                                                                                     | 24.3%                                                                               | 27.8%                                                                               |                                                                                     |
| Maximum Green (s)       | 5.9                                                                               | 36.7                                                                              |                                                                                   | 5.9                                                                               | 36.7                                                                              | 36.7                                                                              | 21.5                                                                               | 25.5                                                                                |                                                                                     | 21.5                                                                                | 25.5                                                                                |                                                                                     |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.3                                                                                | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |                                                                                     |
| All-Red Time (s)        | 2.4                                                                               | 2.6                                                                               |                                                                                   | 2.4                                                                               | 2.6                                                                               | 2.6                                                                               | 3.2                                                                                | 3.2                                                                                 |                                                                                     | 3.2                                                                                 | 3.2                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 6.1                                                                               | 6.3                                                                               |                                                                                   | 6.1                                                                               | 6.3                                                                               | 6.3                                                                               | 6.5                                                                                | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lag                                                                                | Lead                                                                                |                                                                                     | Lag                                                                                 | Lead                                                                                |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             | C-Max                                                                             | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                |                                                                                     |
| Walk Time (s)           |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                    | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 18.0                                                                              | 18.0                                                                              |                                                                                    | 18.0                                                                                |                                                                                     |                                                                                     | 18.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                    | 5                                                                                   |                                                                                     |                                                                                     | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     | 74.0                                                                              | 69.5                                                                              |                                                                                   | 72.2                                                                              | 66.8                                                                              | 66.8                                                                              | 7.8                                                                                | 13.0                                                                                |                                                                                     | 8.0                                                                                 | 15.7                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.64                                                                              | 0.60                                                                              |                                                                                   | 0.63                                                                              | 0.58                                                                              | 0.58                                                                              | 0.07                                                                               | 0.11                                                                                |                                                                                     | 0.07                                                                                | 0.14                                                                                |                                                                                     |
| v/c Ratio               | 0.10                                                                              | 0.45                                                                              |                                                                                   | 0.08                                                                              | 0.35                                                                              | 0.12                                                                              | 0.28                                                                               | 0.24                                                                                |                                                                                     | 0.32                                                                                | 0.16                                                                                |                                                                                     |
| Control Delay           | 8.0                                                                               | 20.4                                                                              |                                                                                   | 10.0                                                                              | 16.1                                                                              | 1.6                                                                               | 56.0                                                                               | 1.2                                                                                 |                                                                                     | 54.1                                                                                | 15.3                                                                                |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             | 8.0                                                                               | 20.4                                                                              |                                                                                   | 10.0                                                                              | 16.1                                                                              | 1.6                                                                               | 56.0                                                                               | 1.2                                                                                 |                                                                                     | 54.1                                                                                | 15.3                                                                                |                                                                                     |
| LOS                     | A                                                                                 | C                                                                                 |                                                                                   | A                                                                                 | B                                                                                 | A                                                                                 | E                                                                                  | A                                                                                   |                                                                                     | D                                                                                   | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 19.9                                                                              |                                                                                   |                                                                                   | 13.9                                                                              |                                                                                   |                                                                                    | 13.5                                                                                |                                                                                     |                                                                                     | 41.0                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Queue Length 50th (m)   | 4.2                                                                               | 89.6                                                                              |                                                                                   | 1.9                                                                               | 39.7                                                                              | 0.0                                                                               | 6.6                                                                                | 0.0                                                                                 |                                                                                     | 7.6                                                                                 | 0.4                                                                                 |                                                                                     |
| Queue Length 95th (m)   | 9.6                                                                               | 91.7                                                                              |                                                                                   | 7.2                                                                               | 73.3                                                                              | 4.7                                                                               | 15.5                                                                               | 0.0                                                                                 |                                                                                     | 14.2                                                                                | 8.4                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                   | 126.7                                                                             |                                                                                   |                                                                                    | 265.2                                                                               |                                                                                     |                                                                                     | 209.8                                                                               |                                                                                     |
| Turn Bay Length (m)     | 80.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 105.0                                                                             | 55.0                                                                               |                                                                                     |                                                                                     | 35.0                                                                                |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 461                                                                               | 2083                                                                              |                                                                                   | 366                                                                               | 2053                                                                              | 936                                                                               | 330                                                                                | 596                                                                                 |                                                                                     | 622                                                                                 | 375                                                                                 |                                                                                     |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       | 0.10                                                                              | 0.45                                                                              |                                                                                   | 0.08                                                                              | 0.35                                                                              | 0.12                                                                              | 0.10                                                                               | 0.19                                                                                |                                                                                     | 0.12                                                                                | 0.10                                                                                |                                                                                     |

#### Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 98 (85%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.45

Intersection Signal Delay: 18.1

Intersection LOS: B

Intersection Capacity Utilization 57.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: Mantra/Tillage & Hazeldean

|                                                                                     |    |                                                                                     |        |                                                                                     |    |                                                                                       |    |
|-------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|----|---------------------------------------------------------------------------------------|----|
|  | Ø1 |  | Ø2 (R) |  | Ø4 |  | Ø3 |
| 12 s                                                                                |    | 43 s                                                                                |        | 32 s                                                                                |    | 28 s                                                                                  |    |
|  | Ø5 |  | Ø6 (R) |  | Ø8 |  | Ø7 |
| 12 s                                                                                |    | 43 s                                                                                |        | 32 s                                                                                |    | 28 s                                                                                  |    |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2029 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 263                                                                               | 870                                                                               | 179                                                                               | 5                                                                                 | 136                                                                               | 404                                                                                | 187                                                                                 | 185                                                                                 | 835                                                                                 | 272                                                                                 | 185                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 263                                                                               | 870                                                                               | 179                                                                               | 5                                                                                 | 136                                                                               | 404                                                                                | 187                                                                                 | 185                                                                                 | 835                                                                                 | 272                                                                                 | 185                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     | 75.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.98                                                                              |                                                                                   | 1.00                                                                              |                                                                                    | 0.98                                                                                | 0.99                                                                                |                                                                                     | 0.98                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3214                                                                              | 3468                                                                              | 1508                                                                              | 0                                                                                 | 3398                                                                              | 3435                                                                               | 1537                                                                                | 3300                                                                                | 3468                                                                                | 1567                                                                                | 3179                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3203                                                                              | 3468                                                                              | 1479                                                                              | 0                                                                                 | 3392                                                                              | 3435                                                                               | 1504                                                                                | 3283                                                                                | 3468                                                                                | 1538                                                                                | 3169                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 179                                                                               |                                                                                   |                                                                                   |                                                                                    | 228                                                                                 |                                                                                     |                                                                                     | 228                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 644.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 38.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                    | 4                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 8%                                                                                | 3%                                                                                | 6%                                                                                | 1%                                                                                | 2%                                                                                | 4%                                                                                 | 4%                                                                                  | 5%                                                                                  | 3%                                                                                  | 2%                                                                                  | 9%                                                                                  |
| Adj. Flow (vph)            | 7                                                                                 | 263                                                                               | 870                                                                               | 179                                                                               | 5                                                                                 | 136                                                                               | 404                                                                                | 187                                                                                 | 185                                                                                 | 835                                                                                 | 272                                                                                 | 185                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 270                                                                               | 870                                                                               | 179                                                                               | 0                                                                                 | 141                                                                               | 404                                                                                | 187                                                                                 | 185                                                                                 | 835                                                                                 | 272                                                                                 | 185                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2029 Total Traffic

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 453   | 326   |
| Future Volume (vph)        | 453   | 326   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 200.0 |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3402  | 1508  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3402  | 1481  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 261   |
| Link Speed (k/h)           | 70    |       |
| Link Distance (m)          | 316.2 |       |
| Travel Time (s)            | 16.3  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Confl. Bikes (#/hr)        |       |       |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 5%    | 6%    |
| Adj. Flow (vph)            | 453   | 326   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 453   | 326   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | Right |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 6     |       |
| Permitted Phases           |       | 6     |
| Detector Phase             | 6     | 6     |
| Switch Phase               |       |       |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2029 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                                | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 21.0                                                                              | 21.0                                                                              | 43.0                                                                              | 43.0                                                                              | 14.0                                                                              | 14.0                                                                              | 36.0                                                                                | 36.0                                                                                | 17.0                                                                                | 36.0                                                                                | 36.0                                                                                | 17.0                                                                                |
| Total Split (%)         | 19.1%                                                                             | 19.1%                                                                             | 39.1%                                                                             | 39.1%                                                                             | 12.7%                                                                             | 12.7%                                                                             | 32.7%                                                                               | 32.7%                                                                               | 15.5%                                                                               | 32.7%                                                                               | 32.7%                                                                               | 15.5%                                                                               |
| Maximum Green (s)       | 14.5                                                                              | 14.5                                                                              | 36.5                                                                              | 36.5                                                                              | 7.5                                                                               | 7.5                                                                               | 29.5                                                                                | 29.5                                                                                | 10.5                                                                                | 29.5                                                                                | 29.5                                                                                | 10.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                 | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                                | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                                | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 13.3                                                                              | 33.0                                                                              | 33.0                                                                              |                                                                                   | 7.4                                                                               | 27.1                                                                                | 27.1                                                                                | 10.1                                                                                | 33.3                                                                                | 33.3                                                                                | 10.3                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              | 0.30                                                                              | 0.30                                                                              |                                                                                   | 0.07                                                                              | 0.25                                                                                | 0.25                                                                                | 0.09                                                                                | 0.30                                                                                | 0.30                                                                                | 0.09                                                                                |
| v/c Ratio               |                                                                                   | 0.70                                                                              | 0.84                                                                              | 0.31                                                                              |                                                                                   | 0.62                                                                              | 0.48                                                                                | 0.35                                                                                | 0.61                                                                                | 0.80                                                                                | 0.44                                                                                | 0.62                                                                                |
| Control Delay           |                                                                                   | 56.2                                                                              | 43.8                                                                              | 5.5                                                                               |                                                                                   | 57.0                                                                              | 38.5                                                                                | 12.0                                                                                | 63.4                                                                                | 34.8                                                                                | 6.8                                                                                 | 52.0                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 56.2                                                                              | 43.8                                                                              | 5.5                                                                               |                                                                                   | 57.0                                                                              | 38.5                                                                                | 12.0                                                                                | 63.4                                                                                | 34.8                                                                                | 6.8                                                                                 | 52.0                                                                                |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | D                                                                                   | B                                                                                   | E                                                                                   | C                                                                                   | A                                                                                   | D                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 41.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 35.3                                                                                |                                                                                     |                                                                                     | 33.0                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 26.4                                                                              | 83.1                                                                              | 0.0                                                                               |                                                                                   | 14.2                                                                              | 39.4                                                                                | 2.1                                                                                 | 12.1                                                                                | 83.1                                                                                | 19.2                                                                                | 18.1                                                                                |
| Queue Length 95th (m)   |                                                                                   | 39.0                                                                              | 101.6                                                                             | 13.5                                                                              |                                                                                   | 23.7                                                                              | 52.3                                                                                | 26.0                                                                                | 30.9                                                                                | #116.1                                                                              | 5.4                                                                                 | 25.1                                                                                |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 620.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                               |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                     | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Base Capacity (vph)     |                                                                                   | 423                                                                               | 1150                                                                              | 610                                                                               |                                                                                   | 231                                                                               | 921                                                                                 | 570                                                                                 | 320                                                                                 | 1049                                                                                | 624                                                                                 | 310                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.64                                                                              | 0.76                                                                              | 0.29                                                                              |                                                                                   | 0.61                                                                              | 0.44                                                                                | 0.33                                                                                | 0.58                                                                                | 0.80                                                                                | 0.44                                                                                | 0.60                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 76 (69%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 34.8

Intersection LOS: C

Intersection Capacity Utilization 81.2%

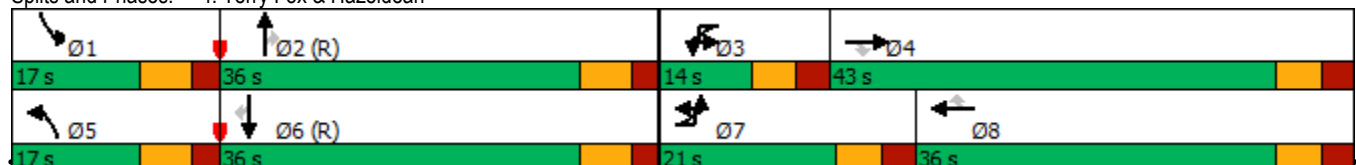
ICU Level of Service D

Analysis Period (min) 15

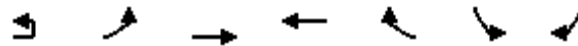
# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

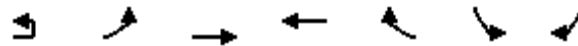
Splits and Phases: 4: Terry Fox & Hazeldean



|                         | ↓     | ↙     |
|-------------------------|-------|-------|
| Lane Group              | SBT   | SBR   |
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 35.5  | 35.5  |
| Total Split (s)         | 36.0  | 36.0  |
| Total Split (%)         | 32.7% | 32.7% |
| Maximum Green (s)       | 29.5  | 29.5  |
| Yellow Time (s)         | 4.2   | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 22.0  | 22.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 33.4  | 33.4  |
| Actuated g/C Ratio      | 0.30  | 0.30  |
| v/c Ratio               | 0.44  | 0.52  |
| Control Delay           | 28.4  | 14.1  |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 28.4  | 14.1  |
| LOS                     | C     | B     |
| Approach Delay          | 28.1  |       |
| Approach LOS            | C     |       |
| Queue Length 50th (m)   | 39.2  | 18.8  |
| Queue Length 95th (m)   | 54.4  | 54.1  |
| Internal Link Dist (m)  | 292.2 |       |
| Turn Bay Length (m)     |       | 200.0 |
| Base Capacity (vph)     | 1033  | 631   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.44  | 0.52  |
| Intersection Summary    |       |       |



| Lane Group                 | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       | ←     | ↑↑    | ↑↑    |       | ←     | ↑     |
| Traffic Volume (vph)       | 4     | 121   | 1032  | 826   | 72    | 74    | 68    |
| Future Volume (vph)        | 4     | 121   | 1032  | 826   | 72    | 74    | 68    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 35.0  |       |       | 0.0   | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       |       | 0     | 1     | 1     |
| Taper Length (m)           |       | 40.0  |       |       |       | 40.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  |
| Ped Bike Factor            |       | 0.99  |       | 1.00  |       | 0.99  | 0.98  |
| Frt                        |       |       |       | 0.988 |       |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1719  | 3468  | 3420  | 0     | 1768  | 1537  |
| Flt Permitted              |       | 0.308 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 554   | 3468  | 3420  | 0     | 1747  | 1500  |
| Right Turn on Red          |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 16    |       |       | 68    |
| Link Speed (k/h)           |       |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 157.6 | 314.8 |       | 401.6 |       |
| Travel Time (s)            |       |       | 9.5   | 18.9  |       | 28.9  |       |
| Confl. Peds. (#/hr)        |       | 10    |       |       | 10    | 10    | 10    |
| Peak Hour Factor           | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 1%    | 4%    | 3%    | 3%    | 1%    | 1%    | 4%    |
| Adj. Flow (vph)            | 4     | 121   | 1032  | 826   | 72    | 74    | 68    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 125   | 1032  | 898   | 0     | 74    | 68    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | L NA  | Left  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 8.0   | 4.0   |       | 4.0   |       |
| Link Offset(m)             |       |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Number of Detectors        | 1     | 1     | 2     | 2     |       | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Thru  |       | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 10.0  |       | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 0.6   |       | 2.0   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex | CI+Ex | CI+Ex |       | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       |       | CI+Ex | CI+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | NA    |       | Perm  | Perm  |
| Protected Phases           |       |       | 2     | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       |       |       | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     |       | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |
| Minimum Initial (s)        | 10.0  | 10.0  | 10.0  | 10.0  |       | 10.0  | 10.0  |



| Lane Group              | EBU   | EBL   | EBT   | WBT   | WBR | SBL   | SBR   |
|-------------------------|-------|-------|-------|-------|-----|-------|-------|
| Minimum Split (s)       | 16.2  | 16.2  | 16.2  | 31.2  |     | 34.1  | 34.1  |
| Total Split (s)         | 76.0  | 76.0  | 76.0  | 76.0  |     | 34.0  | 34.0  |
| Total Split (%)         | 69.1% | 69.1% | 69.1% | 69.1% |     | 30.9% | 30.9% |
| Maximum Green (s)       | 69.8  | 69.8  | 69.8  | 69.8  |     | 27.9  | 27.9  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7   | 3.7   |     | 3.3   | 3.3   |
| All-Red Time (s)        | 2.5   | 2.5   | 2.5   | 2.5   |     | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.2   | 6.2   | 6.2   |     | 6.1   | 6.1   |
| Lead/Lag                |       |       |       |       |     |       |       |
| Lead-Lag Optimize?      |       |       |       |       |     |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max | C-Max | C-Max |     | None  | None  |
| Walk Time (s)           |       |       |       | 7.0   |     | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |       |       | 18.0  |     | 21.0  | 21.0  |
| Pedestrian Calls (#/hr) |       |       |       | 10    |     | 10    | 10    |
| Act Effct Green (s)     |       | 88.3  | 88.3  | 88.3  |     | 13.9  | 13.9  |
| Actuated g/C Ratio      |       | 0.80  | 0.80  | 0.80  |     | 0.13  | 0.13  |
| v/c Ratio               |       | 0.28  | 0.37  | 0.33  |     | 0.34  | 0.27  |
| Control Delay           |       | 15.3  | 12.9  | 4.9   |     | 61.0  | 25.2  |
| Queue Delay             |       | 0.0   | 0.3   | 0.0   |     | 0.0   | 0.0   |
| Total Delay             |       | 15.3  | 13.2  | 4.9   |     | 61.0  | 25.2  |
| LOS                     |       | B     | B     | A     |     | E     | C     |
| Approach Delay          |       |       | 13.4  | 4.9   |     | 43.8  |       |
| Approach LOS            |       |       | B     | A     |     | D     |       |
| Queue Length 50th (m)   |       | 13.1  | 57.2  | 19.7  |     | 14.6  | 2.6   |
| Queue Length 95th (m)   |       | m28.7 | 102.7 | 53.0  |     | m21.8 | m11.1 |
| Internal Link Dist (m)  |       |       | 133.6 | 290.8 |     | 377.6 |       |
| Turn Bay Length (m)     |       | 35.0  |       |       |     | 30.0  |       |
| Base Capacity (vph)     |       | 444   | 2782  | 2747  |     | 443   | 431   |
| Starvation Cap Reductn  |       | 0     | 973   | 0     |     | 0     | 0     |
| Spillback Cap Reductn   |       | 0     | 0     | 0     |     | 0     | 0     |
| Storage Cap Reductn     |       | 0     | 0     | 0     |     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.28  | 0.57  | 0.33  |     | 0.17  | 0.16  |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 73 (66%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.37

Intersection Signal Delay: 11.9

Intersection LOS: B

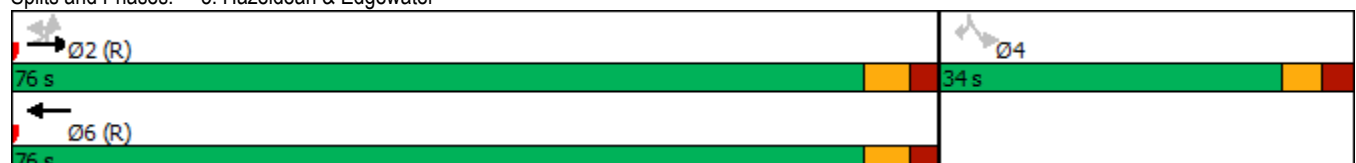
Intersection Capacity Utilization 62.9%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Hazeldean & Edgewater





|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1396                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1005                                                                                |
| Future Volume (vph)        | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1396                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1005                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.887                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                    | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1317                                                                              | 0                                                                                 | 1567                                                                              | 1516                                                                              | 0                                                                                 | 1768                                                                               | 3489                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3402                                                                                |
| Flt Permitted              | 0.693                                                                             |                                                                                   |                                                                                   | 0.755                                                                             |                                                                                   |                                                                                   | 0.268                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.157                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1284                                                                              | 1317                                                                              | 0                                                                                 | 1238                                                                              | 1516                                                                              | 0                                                                                 | 498                                                                                | 3489                                                                                | 0                                                                                   | 0                                                                                   | 286                                                                                 | 3402                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 47                                                                                |                                                                                   |                                                                                    | 3                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                    | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                    | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 33%                                                                               | 14%                                                                               | 50%                                                                               | 3%                                                                                | 1%                                                                                 | 2%                                                                                  | 3%                                                                                  | 1%                                                                                  | 3%                                                                                  | 5%                                                                                  |
| Adj. Flow (vph)            | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1396                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1005                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 14                                                                                | 4                                                                                 | 0                                                                                 | 14                                                                                | 99                                                                                | 0                                                                                 | 1                                                                                  | 1426                                                                                | 0                                                                                   | 0                                                                                   | 161                                                                                 | 1005                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                    | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                              | CI+Ex                                                                               |                                                                                     | CI+Ex                                                                               | CI+Ex                                                                               | CI+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                    | CI+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | CI+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        |       |
| Traffic Volume (vph)       | 12    |
| Future Volume (vph)        | 12    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1480  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1436  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 35    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 8%    |
| Adj. Flow (vph)            | 12    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 12    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |
| Minimum Initial (s)        | 10.0  |

6: Terry Fox & Charlie Rogers/Edgewater  
AM Peak Hour

560 Hazeldean Road  
2029 Total Traffic

| Lane Group              | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBU   | SBL   | SBT   |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-------|
| Minimum Split (s)       | 36.5  | 36.5  |     | 36.5  | 36.5  |     | 34.5  | 34.5  |     | 34.5  | 34.5  | 34.5  |
| Total Split (s)         | 37.0  | 37.0  |     | 37.0  | 37.0  |     | 73.0  | 73.0  |     | 73.0  | 73.0  | 73.0  |
| Total Split (%)         | 33.6% | 33.6% |     | 33.6% | 33.6% |     | 66.4% | 66.4% |     | 66.4% | 66.4% | 66.4% |
| Maximum Green (s)       | 30.5  | 30.5  |     | 30.5  | 30.5  |     | 66.5  | 66.5  |     | 66.5  | 66.5  | 66.5  |
| Yellow Time (s)         | 3.3   | 3.3   |     | 3.3   | 3.3   |     | 4.2   | 4.2   |     | 4.2   | 4.2   | 4.2   |
| All-Red Time (s)        | 3.2   | 3.2   |     | 3.2   | 3.2   |     | 2.3   | 2.3   |     | 2.3   | 2.3   | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5   |     | 6.5   | 6.5   |     | 6.5   | 6.5   |     | 6.5   | 6.5   | 6.5   |
| Lead/Lag                |       |       |     |       |       |     |       |       |     |       |       |       |
| Lead-Lag Optimize?      |       |       |     |       |       |     |       |       |     |       |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |     | None  | None  |     | C-Max | C-Max |     | C-Max | C-Max | C-Max |
| Walk Time (s)           | 7.0   | 7.0   |     | 7.0   | 7.0   |     | 7.0   | 7.0   |     | 7.0   | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 23.0  | 23.0  |     | 23.0  | 23.0  |     | 21.0  | 21.0  |     | 21.0  | 21.0  | 21.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |     | 5     | 5     |     | 5     | 5     |     | 5     | 5     | 5     |
| Act Effct Green (s)     | 14.3  | 14.3  |     | 14.3  | 14.3  |     | 82.7  | 82.7  |     | 82.7  | 82.7  | 82.7  |
| Actuated g/C Ratio      | 0.13  | 0.13  |     | 0.13  | 0.13  |     | 0.75  | 0.75  |     | 0.75  | 0.75  | 0.75  |
| v/c Ratio               | 0.08  | 0.02  |     | 0.09  | 0.42  |     | 0.00  | 0.54  |     | 0.75  | 0.39  | 0.39  |
| Control Delay           | 38.8  | 25.2  |     | 62.4  | 49.5  |     | 2.0   | 5.4   |     | 35.9  | 6.3   | 6.3   |
| Queue Delay             | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   | 0.0   |
| Total Delay             | 38.8  | 25.2  |     | 62.4  | 49.5  |     | 2.0   | 5.4   |     | 35.9  | 6.3   | 6.3   |
| LOS                     | D     | C     |     | E     | D     |     | A     | A     |     | D     | A     | A     |
| Approach Delay          |       | 35.8  |     |       | 51.1  |     |       | 5.4   |     |       |       | 10.3  |
| Approach LOS            |       | D     |     |       | D     |     |       | A     |     |       |       | B     |
| Queue Length 50th (m)   | 2.6   | 0.2   |     | 3.0   | 12.7  |     | 0.0   | 4.7   |     | 12.2  | 24.8  | 24.8  |
| Queue Length 95th (m)   | 6.6   | 2.6   |     | m9.3  | 30.8  |     | m0.0  | 22.0  |     | #68.0 | 67.8  | 67.8  |
| Internal Link Dist (m)  |       | 193.1 |     |       | 258.1 |     |       | 229.3 |     |       |       | 336.0 |
| Turn Bay Length (m)     |       |       |     | 65.0  |       |     |       |       |     | 55.0  |       |       |
| Base Capacity (vph)     | 356   | 367   |     | 343   | 454   |     | 374   | 2624  |     | 215   | 2557  | 2557  |
| Starvation Cap Reductn  | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     | 0     | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     | 0     | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     | 0     | 0     | 0     |
| Reduced v/c Ratio       | 0.04  | 0.01  |     | 0.04  | 0.22  |     | 0.00  | 0.54  |     | 0.75  | 0.39  | 0.39  |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 16 (15%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 9.6

Intersection LOS: A

Intersection Capacity Utilization 78.3%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 73.0  |
| Total Split (%)         | 66.4% |
| Maximum Green (s)       | 66.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 82.7  |
| Actuated g/C Ratio      | 0.75  |
| v/c Ratio               | 0.01  |
| Control Delay           | 0.2   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.2   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.5   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1088  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (vph)       | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1268                                                                                | 1                                                                                   | 0                                                                                   | 845                                                                                 | 0                                                                                   |
| Future Volume (vph)        | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1268                                                                                | 1                                                                                   | 0                                                                                   | 845                                                                                 | 0                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 35.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 | 55.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)           | 25.0                                                                              |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     | 50.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.98                                                                              |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1861                                                                              | 1553                                                                              | 0                                                                                 | 1768                                                                              | 1861                                                                              | 0                                                                                 | 1768                                                                               | 3468                                                                                | 0                                                                                   | 1861                                                                                | 3370                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   | 0.769                                                                             |                                                                                   |                                                                                   | 0.334                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1861                                                                              | 1553                                                                              | 0                                                                                 | 1422                                                                              | 1861                                                                              | 0                                                                                 | 620                                                                                | 3468                                                                                | 0                                                                                   | 1861                                                                                | 3370                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 190                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 207.5                                                                             |                                                                                   |                                                                                   | 88.7                                                                              |                                                                                   |                                                                                    | 316.2                                                                               |                                                                                     |                                                                                     | 253.3                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 14.9                                                                              |                                                                                   |                                                                                   | 10.6                                                                              |                                                                                   |                                                                                    | 16.3                                                                                |                                                                                     |                                                                                     | 13.0                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 3%                                                                                  | 1%                                                                                  | 1%                                                                                  | 6%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1268                                                                                | 1                                                                                   | 0                                                                                   | 845                                                                                 | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 3                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1269                                                                                | 0                                                                                   | 0                                                                                   | 845                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                               | Left                                                                                | Right                                                                               | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 12.0                                                                                |                                                                                     |                                                                                     | 12.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |                                                                                     |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |                                                                                     |
| Detector 1 Type            | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                              | CI+Ex                                                                               |                                                                                     | CI+Ex                                                                               | CI+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                    | CI+Ex                                                                               |                                                                                     |                                                                                     | CI+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              |                                                                                   |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |

|                                                                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                                                              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Split (s)                                                       | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.5                                                                               | 32.5                                                                                |                                                                                     | 32.5                                                                                | 32.5                                                                                |                                                                                     |
| Total Split (s)                                                         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              |                                                                                   | 77.0                                                                               | 77.0                                                                                |                                                                                     | 77.0                                                                                | 77.0                                                                                |                                                                                     |
| Total Split (%)                                                         | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 70.0%                                                                              | 70.0%                                                                               |                                                                                     | 70.0%                                                                               | 70.0%                                                                               |                                                                                     |
| Maximum Green (s)                                                       | 26.8                                                                              | 26.8                                                                              |                                                                                   | 26.8                                                                              | 26.8                                                                              |                                                                                   | 70.5                                                                               | 70.5                                                                                |                                                                                     | 70.5                                                                                | 70.5                                                                                |                                                                                     |
| Yellow Time (s)                                                         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 |                                                                                     |
| All-Red Time (s)                                                        | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 |                                                                                     |
| Lost Time Adjust (s)                                                    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)                                                     | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.5                                                                                | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode                                                             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Walk Time (s)                                                           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)                                                     | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                               | 19.0                                                                                |                                                                                     | 19.0                                                                                | 19.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr)                                                 | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)                                                     |                                                                                   | 13.2                                                                              |                                                                                   | 13.2                                                                              |                                                                                   |                                                                                   | 102.3                                                                              | 102.3                                                                               |                                                                                     |                                                                                     | 102.3                                                                               |                                                                                     |
| Actuated g/C Ratio                                                      |                                                                                   | 0.12                                                                              |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.93                                                                               | 0.93                                                                                |                                                                                     |                                                                                     | 0.93                                                                                |                                                                                     |
| v/c Ratio                                                               |                                                                                   | 0.01                                                                              |                                                                                   | 0.01                                                                              |                                                                                   |                                                                                   | 0.02                                                                               | 0.39                                                                                |                                                                                     |                                                                                     | 0.27                                                                                |                                                                                     |
| Control Delay                                                           |                                                                                   | 0.0                                                                               |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                   | 9.2                                                                                | 8.7                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Queue Delay                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                   | 9.2                                                                                | 8.7                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| LOS                                                                     |                                                                                   | A                                                                                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Approach Delay                                                          |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                    | 8.7                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Approach LOS                                                            |                                                                                   |                                                                                   |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (m)                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 0.2                                                                               |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Queue Length 95th (m)                                                   |                                                                                   | 0.0                                                                               |                                                                                   | 1.4                                                                               |                                                                                   |                                                                                   | m2.0                                                                               | 146.4                                                                               |                                                                                     |                                                                                     | 1.6                                                                                 |                                                                                     |
| Internal Link Dist (m)                                                  |                                                                                   | 183.5                                                                             |                                                                                   |                                                                                   | 64.7                                                                              |                                                                                   |                                                                                    | 292.2                                                                               |                                                                                     |                                                                                     | 229.3                                                                               |                                                                                     |
| Turn Bay Length (m)                                                     |                                                                                   |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)                                                     |                                                                                   | 522                                                                               |                                                                                   | 346                                                                               |                                                                                   |                                                                                   | 576                                                                                | 3224                                                                                |                                                                                     |                                                                                     | 3133                                                                                |                                                                                     |
| Starvation Cap Reductn                                                  |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn                                                   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn                                                     |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio                                                       |                                                                                   | 0.01                                                                              |                                                                                   | 0.00                                                                              |                                                                                   |                                                                                   | 0.02                                                                               | 0.39                                                                                |                                                                                     |                                                                                     | 0.27                                                                                |                                                                                     |
| Intersection Summary                                                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Area Type:                                                              | Other                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Cycle Length: 110                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Actuated Cycle Length: 110                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Offset: 26 (24%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Natural Cycle: 65                                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Control Type: Actuated-Coordinated                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Maximum v/c Ratio: 0.39                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Signal Delay: 5.4                                          |                                                                                   |                                                                                   |                                                                                   | Intersection LOS: A                                                               |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Capacity Utilization 58.0%                                 |                                                                                   |                                                                                   |                                                                                   | ICU Level of Service B                                                            |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Analysis Period (min) 15                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| m Volume for 95th percentile queue is metered by upstream signal.       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Splits and Phases: 7: Terry Fox & Tony Graham Rec



8: Terry Fox & Sobey's  
AM Peak Hour

560 Hazeldean Road  
2029 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1244                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 750                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1244                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 750                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 10.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 30.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.91                                                                                | 0.91                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              | 0.98                                                                              | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.910                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.994                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.996                                                                               |
| Flt Protected              |                                                                                   | 0.986                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1526                                                                              | 0                                                                                 | 0                                                                                 | 1742                                                                              | 1567                                                                              | 1581                                                                               | 5042                                                                                | 0                                                                                   | 0                                                                                   | 1722                                                                                | 3421                                                                                |
| Flt Permitted              |                                                                                   | 0.899                                                                             |                                                                                   |                                                                                   | 0.715                                                                             |                                                                                   | 0.314                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.201                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1389                                                                              | 0                                                                                 | 0                                                                                 | 1297                                                                              | 1537                                                                              | 521                                                                                | 5042                                                                                | 0                                                                                   | 0                                                                                   | 364                                                                                 | 3421                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 16                                                                                |                                                                                   |                                                                                   |                                                                                   | 109                                                                               |                                                                                    | 10                                                                                  |                                                                                     |                                                                                     |                                                                                     | 3                                                                                   |
| Link Speed (k/h)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 132.0                                                                             |                                                                                   |                                                                                   | 152.6                                                                             |                                                                                   |                                                                                    | 140.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 142.7                                                                               |
| Travel Time (s)            |                                                                                   | 15.8                                                                              |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                    | 7.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.3                                                                                 |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 29%                                                                               | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 13%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 4%                                                                                  | 4%                                                                                  |
| Adj. Flow (vph)            | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1244                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 750                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 24                                                                                | 0                                                                                 | 0                                                                                 | 31                                                                                | 52                                                                                | 8                                                                                  | 1296                                                                                | 0                                                                                   | 0                                                                                   | 31                                                                                  | 768                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                              | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 5                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |      |    |
|----------------------------|------|----|
| Lane Group                 | SBR  | Ø9 |
| Lane Configurations        |      |    |
| Traffic Volume (vph)       | 18   |    |
| Future Volume (vph)        | 18   |    |
| Ideal Flow (vphpl)         | 1800 |    |
| Storage Length (m)         | 0.0  |    |
| Storage Lanes              | 0    |    |
| Taper Length (m)           |      |    |
| Lane Util. Factor          | 0.95 |    |
| Ped Bike Factor            |      |    |
| Frt                        |      |    |
| Flt Protected              |      |    |
| Satd. Flow (prot)          | 0    |    |
| Flt Permitted              |      |    |
| Satd. Flow (perm)          | 0    |    |
| Right Turn on Red          | Yes  |    |
| Satd. Flow (RTOR)          |      |    |
| Link Speed (k/h)           |      |    |
| Link Distance (m)          |      |    |
| Travel Time (s)            |      |    |
| Confl. Peds. (#/hr)        | 5    |    |
| Confl. Bikes (#/hr)        |      |    |
| Peak Hour Factor           | 1.00 |    |
| Heavy Vehicles (%)         | 1%   |    |
| Adj. Flow (vph)            | 18   |    |
| Shared Lane Traffic (%)    |      |    |
| Lane Group Flow (vph)      | 0    |    |
| Enter Blocked Intersection | No   |    |
| Lane Alignment             | R NA |    |
| Median Width(m)            |      |    |
| Link Offset(m)             |      |    |
| Crosswalk Width(m)         |      |    |
| Two way Left Turn Lane     |      |    |
| Headway Factor             | 1.01 |    |
| Number of Detectors        |      |    |
| Detector Template          |      |    |
| Leading Detector (m)       |      |    |
| Trailing Detector (m)      |      |    |
| Detector 1 Position(m)     |      |    |
| Detector 1 Size(m)         |      |    |
| Detector 1 Type            |      |    |
| Detector 1 Channel         |      |    |
| Detector 1 Extend (s)      |      |    |
| Detector 1 Queue (s)       |      |    |
| Detector 1 Delay (s)       |      |    |
| Detector 2 Position(m)     |      |    |
| Detector 2 Size(m)         |      |    |
| Detector 2 Type            |      |    |
| Detector 2 Channel         |      |    |
| Detector 2 Extend (s)      |      |    |
| Turn Type                  |      |    |
| Protected Phases           | 9    |    |
| Permitted Phases           |      |    |
| Detector Phase             |      |    |
| Switch Phase               |      |    |



8: Terry Fox & Sobey's  
AM Peak Hour

560 Hazeldean Road  
2029 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 5.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 11.2                                                                               | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                | 26.0                                                                                |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 15.0                                                                               | 72.0                                                                                |                                                                                     | 57.0                                                                                | 57.0                                                                                | 57.0                                                                                |
| Total Split (%)         | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 30.0%                                                                             | 30.0%                                                                             | 30.0%                                                                             | 13.6%                                                                              | 65.5%                                                                               |                                                                                     | 51.8%                                                                               | 51.8%                                                                               | 51.8%                                                                               |
| Maximum Green (s)       | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 9.0                                                                                | 66.0                                                                                |                                                                                     | 51.0                                                                                | 51.0                                                                                | 51.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 1.8                                                                                | 1.8                                                                                 |                                                                                     | 1.8                                                                                 | 1.8                                                                                 | 1.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               | 6.0                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 6.0                                                                                 |
| Lead/Lag                | Lead                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lag                                                                                |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               |                                                                                    | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 17.0                                                                              | 17.0                                                                              |                                                                                   | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              |                                                                                    | 13.0                                                                                |                                                                                     | 13.0                                                                                | 13.0                                                                                | 13.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 |                                                                                    | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 12.8                                                                              |                                                                                   |                                                                                   | 12.8                                                                              | 12.8                                                                              | 82.6                                                                               | 82.6                                                                                |                                                                                     |                                                                                     | 80.2                                                                                | 80.2                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.12                                                                              | 0.12                                                                              | 0.75                                                                               | 0.75                                                                                |                                                                                     |                                                                                     | 0.73                                                                                | 0.73                                                                                |
| v/c Ratio               |                                                                                   | 0.14                                                                              |                                                                                   |                                                                                   | 0.21                                                                              | 0.19                                                                              | 0.02                                                                               | 0.34                                                                                |                                                                                     |                                                                                     | 0.12                                                                                | 0.31                                                                                |
| Control Delay           |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              | 1.5                                                                               | 2.8                                                                                | 4.1                                                                                 |                                                                                     |                                                                                     | 4.3                                                                                 | 2.7                                                                                 |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              | 1.5                                                                               | 2.8                                                                                | 4.1                                                                                 |                                                                                     |                                                                                     | 4.3                                                                                 | 2.7                                                                                 |
| LOS                     |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 | A                                                                                 | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 17.8                                                                              |                                                                                   |                                                                                    | 4.1                                                                                 |                                                                                     |                                                                                     |                                                                                     | 2.8                                                                                 |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 1.5                                                                               |                                                                                   |                                                                                   | 5.8                                                                               | 0.0                                                                               | 0.3                                                                                | 36.3                                                                                |                                                                                     |                                                                                     | 0.4                                                                                 | 4.7                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 12.4                                                                              | 0.0                                                                               | m0.3                                                                               | 25.5                                                                                |                                                                                     |                                                                                     | m2.5                                                                                | 17.3                                                                                |
| Internal Link Dist (m)  |                                                                                   | 108.0                                                                             |                                                                                   |                                                                                   | 128.6                                                                             |                                                                                   |                                                                                    | 116.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 118.7                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 306                                                                               | 446                                                                               | 478                                                                                | 3788                                                                                |                                                                                     |                                                                                     | 265                                                                                 | 2493                                                                                |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.07                                                                              |                                                                                   |                                                                                   | 0.10                                                                              | 0.12                                                                              | 0.02                                                                               | 0.34                                                                                |                                                                                     |                                                                                     | 0.12                                                                                | 0.31                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 80 (73%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.34

Intersection Signal Delay: 4.3

Intersection LOS: A

Intersection Capacity Utilization 64.1%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Terry Fox & Sobey's



|                         |     |     |
|-------------------------|-----|-----|
| Lane Group              | SBR | Ø9  |
| Minimum Initial (s)     |     | 3.0 |
| Minimum Split (s)       |     | 5.0 |
| Total Split (s)         |     | 5.0 |
| Total Split (%)         |     | 5%  |
| Maximum Green (s)       |     | 3.0 |
| Yellow Time (s)         |     | 2.0 |
| All-Red Time (s)        |     | 0.0 |
| Lost Time Adjust (s)    |     |     |
| Total Lost Time (s)     |     |     |
| Lead/Lag                |     |     |
| Lead-Lag Optimize?      |     |     |
| Vehicle Extension (s)   |     | 3.0 |
| Recall Mode             |     | Max |
| Walk Time (s)           |     |     |
| Flash Dont Walk (s)     |     |     |
| Pedestrian Calls (#/hr) |     |     |
| Act Effct Green (s)     |     |     |
| Actuated g/C Ratio      |     |     |
| v/c Ratio               |     |     |
| Control Delay           |     |     |
| Queue Delay             |     |     |
| Total Delay             |     |     |
| LOS                     |     |     |
| Approach Delay          |     |     |
| Approach LOS            |     |     |
| Queue Length 50th (m)   |     |     |
| Queue Length 95th (m)   |     |     |
| Internal Link Dist (m)  |     |     |
| Turn Bay Length (m)     |     |     |
| Base Capacity (vph)     |     |     |
| Starvation Cap Reductn  |     |     |
| Spillback Cap Reductn   |     |     |
| Storage Cap Reductn     |     |     |
| Reduced v/c Ratio       |     |     |
| Intersection Summary    |     |     |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |   |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                   | 1233                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 692                                                                                 |
| Future Volume (vph)        | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                   | 1233                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 692                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 15.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 65.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 120.0                                                                               |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 20.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                                | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.910                                                                             |                                                                                   |                                                                                   | 0.857                                                                             |                                                                                   |                                                                                     | 0.995                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1462                                                                              | 0                                                                                 | 1734                                                                              | 1555                                                                              | 0                                                                                 | 1069                                                                                | 3481                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3435                                                                                |
| Flt Permitted              | 0.689                                                                             |                                                                                   |                                                                                   | 0.741                                                                             |                                                                                   |                                                                                   | 0.387                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.193                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1276                                                                              | 1462                                                                              | 0                                                                                 | 1345                                                                              | 1555                                                                              | 0                                                                                 | 434                                                                                 | 3481                                                                                | 0                                                                                   | 0                                                                                   | 358                                                                                 | 3435                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 15                                                                                |                                                                                   |                                                                                   | 63                                                                                |                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 40                                                                                |                                                                                   |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 65.4                                                                              |                                                                                   |                                                                                   | 381.2                                                                             |                                                                                   |                                                                                     | 479.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 200.7                                                                               |
| Travel Time (s)            |                                                                                   | 4.7                                                                               |                                                                                   |                                                                                   | 34.3                                                                              |                                                                                   |                                                                                     | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     | 10.3                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                   |                                                                                     | 10                                                                                  |                                                                                     | 10                                                                                  |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 20%                                                                               | 13%                                                                               | 3%                                                                                | 20%                                                                               | 1%                                                                                | 67%                                                                                 | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 4%                                                                                  |
| Adj. Flow (vph)            | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                   | 1233                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 692                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 20                                                                                | 25                                                                                | 0                                                                                 | 30                                                                                | 106                                                                               | 0                                                                                 | 6                                                                                   | 1274                                                                                | 0                                                                                   | 0                                                                                   | 77                                                                                  | 692                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                                | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                               | CI+Ex                                                                               |                                                                                     | CI+Ex                                                                               | CI+Ex                                                                               | CI+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                     | CI+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | CI+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)        | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        |       |
| Traffic Volume (vph)       | 10    |
| Future Volume (vph)        | 10    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 55.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1531  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 30    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 10    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 10    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |
| Minimum Initial (s)        | 10.0  |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Split (s)       | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 28.3                                                                               | 28.3                                                                                |                                                                                     | 28.3                                                                                | 28.3                                                                                | 28.3                                                                                |
| Total Split (s)         | 38.0                                                                              | 38.0                                                                              |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 72.0                                                                               | 72.0                                                                                |                                                                                     | 72.0                                                                                | 72.0                                                                                | 72.0                                                                                |
| Total Split (%)         | 34.5%                                                                             | 34.5%                                                                             |                                                                                   | 34.5%                                                                             | 34.5%                                                                             |                                                                                   | 65.5%                                                                              | 65.5%                                                                               |                                                                                     | 65.5%                                                                               | 65.5%                                                                               | 65.5%                                                                               |
| Maximum Green (s)       | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 65.7                                                                               | 65.7                                                                                |                                                                                     | 65.7                                                                                | 65.7                                                                                | 65.7                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.1                                                                                | 2.1                                                                                 |                                                                                     | 2.1                                                                                 | 2.1                                                                                 | 2.1                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.3                                                                                | 6.3                                                                                 |                                                                                     | 6.3                                                                                 | 6.3                                                                                 | 6.3                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 15.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 10                                                                                 | 10                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 14.2                                                                              | 14.2                                                                              |                                                                                   | 14.2                                                                              | 14.2                                                                              |                                                                                   | 83.5                                                                               | 83.5                                                                                |                                                                                     | 83.5                                                                                | 83.5                                                                                | 83.5                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.76                                                                               | 0.76                                                                                |                                                                                     | 0.76                                                                                | 0.76                                                                                | 0.76                                                                                |
| v/c Ratio               | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.17                                                                              | 0.42                                                                              |                                                                                   | 0.02                                                                               | 0.48                                                                                |                                                                                     | 0.28                                                                                | 0.27                                                                                | 0.27                                                                                |
| Control Delay           | 40.1                                                                              | 23.2                                                                              |                                                                                   | 41.6                                                                              | 23.5                                                                              |                                                                                   | 6.0                                                                                | 6.8                                                                                 |                                                                                     | 17.6                                                                                | 10.0                                                                                | 10.0                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 40.1                                                                              | 23.2                                                                              |                                                                                   | 41.6                                                                              | 23.5                                                                              |                                                                                   | 6.0                                                                                | 6.8                                                                                 |                                                                                     | 17.6                                                                                | 10.0                                                                                | 10.0                                                                                |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     | B                                                                                   | B                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 30.7                                                                              |                                                                                   |                                                                                   | 27.5                                                                              |                                                                                   |                                                                                    | 6.8                                                                                 |                                                                                     |                                                                                     |                                                                                     | 10.7                                                                                |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 3.7                                                                               | 1.9                                                                               |                                                                                   | 5.6                                                                               | 8.1                                                                               |                                                                                   | 0.2                                                                                | 33.4                                                                                |                                                                                     | 6.0                                                                                 | 28.0                                                                                | 28.0                                                                                |
| Queue Length 95th (m)   | 8.4                                                                               | 7.5                                                                               |                                                                                   | 11.3                                                                              | 18.7                                                                              |                                                                                   | 2.0                                                                                | 91.9                                                                                |                                                                                     | 22.0                                                                                | 60.3                                                                                | 60.3                                                                                |
| Internal Link Dist (m)  |                                                                                   | 41.4                                                                              |                                                                                   |                                                                                   | 357.2                                                                             |                                                                                   |                                                                                    | 455.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 176.7                                                                               |
| Turn Bay Length (m)     | 15.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     | 120.0                                                                               |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 371                                                                               | 435                                                                               |                                                                                   | 391                                                                               | 497                                                                               |                                                                                   | 329                                                                                | 2645                                                                                |                                                                                     | 271                                                                                 | 2608                                                                                | 2608                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.05                                                                              | 0.06                                                                              |                                                                                   | 0.08                                                                              | 0.21                                                                              |                                                                                   | 0.02                                                                               | 0.48                                                                                |                                                                                     | 0.28                                                                                | 0.27                                                                                | 0.27                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 40 (36%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 9.9

Intersection LOS: A

Intersection Capacity Utilization 72.2%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Terry Fox & Halkirk/Winchester



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Split (s)       | 28.3  |
| Total Split (s)         | 72.0  |
| Total Split (%)         | 65.5% |
| Maximum Green (s)       | 65.7  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.1   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.3   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 15.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 83.5  |
| Actuated g/C Ratio      | 0.76  |
| v/c Ratio               | 0.01  |
| Control Delay           | 6.0   |
| Queue Delay             | 0.0   |
| Total Delay             | 6.0   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.1   |
| Queue Length 95th (m)   | m1.0  |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 55.0  |
| Base Capacity (vph)     | 1169  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |

|                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
|                                   |  |  |  |  |  |  |
| Lane Group                        | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | NBL                                                                               | NBR                                                                               |
| Lane Configurations               |  |                                                                                   |  |  |  |                                                                                   |
| Traffic Volume (vph)              | 1112                                                                              | 0                                                                                 | 0                                                                                 | 865                                                                               | 0                                                                                 | 0                                                                                 |
| Future Volume (vph)               | 1112                                                                              | 0                                                                                 | 0                                                                                 | 865                                                                               | 0                                                                                 | 0                                                                                 |
| Ideal Flow (vphpl)                | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)                |                                                                                   | 0.0                                                                               | 85.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                               |
| Storage Lanes                     |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |
| Taper Length (m)                  |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   | 10.0                                                                              |                                                                                   |
| Lane Util. Factor                 | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              |
| Ped Bike Factor                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Frt                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Flt Protected                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Satd. Flow (prot)                 | 3502                                                                              | 0                                                                                 | 1843                                                                              | 3502                                                                              | 1843                                                                              | 0                                                                                 |
| Flt Permitted                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Satd. Flow (perm)                 | 3502                                                                              | 0                                                                                 | 1843                                                                              | 3502                                                                              | 1843                                                                              | 0                                                                                 |
| Link Speed (k/h)                  | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                | 50                                                                                |                                                                                   |
| Link Distance (m)                 | 150.7                                                                             |                                                                                   |                                                                                   | 644.5                                                                             | 279.6                                                                             |                                                                                   |
| Travel Time (s)                   | 10.9                                                                              |                                                                                   |                                                                                   | 46.4                                                                              | 20.1                                                                              |                                                                                   |
| Confl. Peds. (#/hr)               |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Peak Hour Factor                  | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Adj. Flow (vph)                   | 1112                                                                              | 0                                                                                 | 0                                                                                 | 865                                                                               | 0                                                                                 | 0                                                                                 |
| Shared Lane Traffic (%)           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)             | 1112                                                                              | 0                                                                                 | 0                                                                                 | 865                                                                               | 0                                                                                 | 0                                                                                 |
| Enter Blocked Intersection        | No                                                                                | No                                                                                | Yes                                                                               | Yes                                                                               | No                                                                                | No                                                                                |
| Lane Alignment                    | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               | 4.0                                                                               |                                                                                   |
| Link Offset(m)                    | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)                | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor                    | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Sign Control                      | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              | Stop                                                                              |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Area Type:                        | Other                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Control Type:                     | Unsignalized                                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization | 35.8%                                                                             |                                                                                   |                                                                                   | ICU Level of Service A                                                            |                                                                                   |                                                                                   |
| Analysis Period (min)             | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 301                                                                               | 1071                                                                              | 17                                                                                | 1                                                                                 | 147                                                                               | 1421                                                                               | 106                                                                                 | 16                                                                                  | 257                                                                                 | 108                                                                                 | 139                                                                                 |
| Future Volume (vph)        | 2                                                                                 | 301                                                                               | 1071                                                                              | 17                                                                                | 1                                                                                 | 147                                                                               | 1421                                                                               | 106                                                                                 | 16                                                                                  | 257                                                                                 | 108                                                                                 | 139                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                    | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                    |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 0.99                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3494                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3537                                                                               | 1582                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3426                                                                              | 3494                                                                              | 0                                                                                 | 0                                                                                 | 3390                                                                              | 3537                                                                               | 1555                                                                                | 1746                                                                                | 3502                                                                                | 1539                                                                                | 3408                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 128                                                                                 |                                                                                     |                                                                                     | 128                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                              |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                               |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 1%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 301                                                                               | 1071                                                                              | 17                                                                                | 1                                                                                 | 147                                                                               | 1421                                                                               | 106                                                                                 | 16                                                                                  | 257                                                                                 | 108                                                                                 | 139                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 303                                                                               | 1088                                                                              | 0                                                                                 | 0                                                                                 | 148                                                                               | 1421                                                                               | 106                                                                                 | 16                                                                                  | 257                                                                                 | 108                                                                                 | 139                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 97                                                                                | 14                                                                                | 97                                                                                |                                                                                    | 14                                                                                  | 97                                                                                  |                                                                                     | 97                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                  |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                  | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 418   | 390   |
| Future Volume (vph)        | 418   | 390   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 60.0  |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3502  | 1582  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3502  | 1555  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 183   |
| Link Speed (k/h)           | 50    |       |
| Link Distance (m)          | 251.2 |       |
| Travel Time (s)            | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 2%    | 1%    |
| Adj. Flow (vph)            | 418   | 390   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 418   | 390   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | R NA  |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 4     |       |
| Permitted Phases           |       | 4     |
| Detector Phase             | 4     | 4     |
| Switch Phase               |       |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 61.0                                                                              |                                                                                   | 15.0                                                                              | 15.0                                                                              | 60.0                                                                                | 60.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 12.3%                                                                             | 12.3%                                                                             | 46.9%                                                                             |                                                                                   | 11.5%                                                                             | 11.5%                                                                             | 46.2%                                                                               | 46.2%                                                                               | 9.2%                                                                                | 32.3%                                                                               | 32.3%                                                                               | 9.2%                                                                                |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 54.9                                                                              |                                                                                   | 8.9                                                                               | 8.9                                                                               | 53.9                                                                                | 53.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                 | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                               | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                                | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 17.6                                                                              | 68.6                                                                              |                                                                                   |                                                                                   | 9.9                                                                               | 60.9                                                                                | 60.9                                                                                | 5.8                                                                                 | 21.2                                                                                | 21.2                                                                                | 5.9                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.53                                                                              |                                                                                   |                                                                                   | 0.08                                                                              | 0.47                                                                                | 0.47                                                                                | 0.04                                                                                | 0.16                                                                                | 0.16                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.65                                                                              | 0.59                                                                              |                                                                                   |                                                                                   | 0.57                                                                              | 0.86                                                                                | 0.13                                                                                | 0.21                                                                                | 0.45                                                                                | 0.30                                                                                | 0.90                                                                                |
| Control Delay           |                                                                                   | 61.1                                                                              | 24.8                                                                              |                                                                                   |                                                                                   | 84.7                                                                              | 28.7                                                                                | 1.9                                                                                 | 66.2                                                                                | 49.9                                                                                | 6.1                                                                                 | 110.5                                                                               |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 61.1                                                                              | 24.8                                                                              |                                                                                   |                                                                                   | 84.7                                                                              | 28.7                                                                                | 1.9                                                                                 | 66.2                                                                                | 49.9                                                                                | 6.1                                                                                 | 110.5                                                                               |
| LOS                     |                                                                                   | E                                                                                 | C                                                                                 |                                                                                   |                                                                                   | F                                                                                 | C                                                                                   | A                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   | F                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 32.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 31.9                                                                                |                                                                                     |                                                                                     | 38.2                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   | C                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 34.7                                                                              | 81.0                                                                              |                                                                                   |                                                                                   | 17.3                                                                              | 167.0                                                                               | 3.1                                                                                 | 3.7                                                                                 | 31.0                                                                                | 0.0                                                                                 | 17.1                                                                                |
| Queue Length 95th (m)   |                                                                                   | #70.3                                                                             | 135.3                                                                             |                                                                                   |                                                                                   | 27.3                                                                              | #219.4                                                                              | 3.3                                                                                 | 10.8                                                                                | 35.7                                                                                | 8.9                                                                                 | #35.1                                                                               |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                               |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 464                                                                               | 1844                                                                              |                                                                                   |                                                                                   | 264                                                                               | 1658                                                                                | 796                                                                                 | 79                                                                                  | 967                                                                                 | 517                                                                                 | 155                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.65                                                                              | 0.59                                                                              |                                                                                   |                                                                                   | 0.56                                                                              | 0.86                                                                                | 0.13                                                                                | 0.20                                                                                | 0.27                                                                                | 0.21                                                                                | 0.90                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 15 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 37.2

Intersection LOS: D

Intersection Capacity Utilization 101.6%

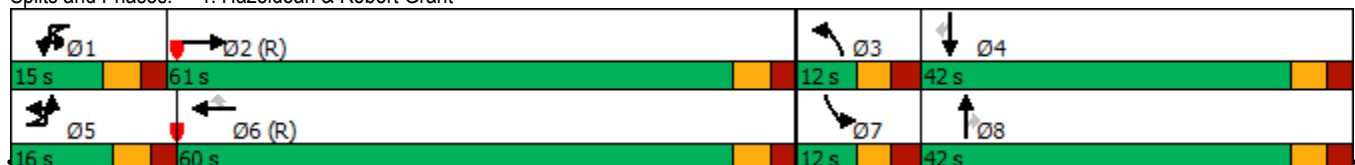
ICU Level of Service G

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Hazeldean & Robert Grant





| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 41.1  | 41.1  |
| Total Split (s)         | 42.0  | 42.0  |
| Total Split (%)         | 32.3% | 32.3% |
| Maximum Green (s)       | 35.9  | 35.9  |
| Yellow Time (s)         | 3.3   | 3.3   |
| All-Red Time (s)        | 2.8   | 2.8   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.1   | 6.1   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 28.0  | 28.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 28.4  | 28.4  |
| Actuated g/C Ratio      | 0.22  | 0.22  |
| v/c Ratio               | 0.55  | 0.81  |
| Control Delay           | 47.3  | 38.4  |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 47.3  | 38.4  |
| LOS                     | D     | D     |
| Approach Delay          | 52.9  |       |
| Approach LOS            | D     |       |
| Queue Length 50th (m)   | 47.1  | 49.3  |
| Queue Length 95th (m)   | 57.1  | 78.5  |
| Internal Link Dist (m)  | 227.2 |       |
| Turn Bay Length (m)     |       | 60.0  |
| Base Capacity (vph)     | 967   | 561   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.43  | 0.70  |
| Intersection Summary    |       |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |  |
| Traffic Volume (vph)       | 166                                                                               | 1165                                                                              | 83                                                                                | 41                                                                                | 1394                                                                              | 61                                                                                | 81                                                                                 | 0                                                                                   | 31                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Future Volume (vph)        | 166                                                                               | 1165                                                                              | 83                                                                                | 41                                                                                | 1394                                                                              | 61                                                                                | 81                                                                                 | 0                                                                                   | 31                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 75.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 180.0                                                                             | 0.0                                                                                |                                                                                     | 0.0                                                                                 | 40.0                                                                                |                                                                                     | 40.0                                                                                |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   | 0.97                                                                              | 0.99                                                                               | 0.98                                                                                |                                                                                     | 0.99                                                                                |                                                                                     | 0.98                                                                                |
| Frt                        |                                                                                   | 0.990                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 3491                                                                              | 0                                                                                 | 1751                                                                              | 3502                                                                              | 1582                                                                              | 1751                                                                               | 1536                                                                                | 0                                                                                   | 1768                                                                                | 1843                                                                                | 1582                                                                                |
| Flt Permitted              | 0.130                                                                             |                                                                                   |                                                                                   | 0.224                                                                             |                                                                                   |                                                                                   | 0.757                                                                              |                                                                                     |                                                                                     | 0.737                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 242                                                                               | 3491                                                                              | 0                                                                                 | 412                                                                               | 3502                                                                              | 1530                                                                              | 1384                                                                               | 1536                                                                                | 0                                                                                   | 1362                                                                                | 1843                                                                                | 1551                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 13                                                                                |                                                                                   |                                                                                   |                                                                                   | 79                                                                                |                                                                                    | 118                                                                                 |                                                                                     |                                                                                     |                                                                                     | 206                                                                                 |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                    | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 297.5                                                                             |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                    | 259.5                                                                               |                                                                                     |                                                                                     | 237.4                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 17.9                                                                              |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                    | 18.7                                                                                |                                                                                     |                                                                                     | 17.1                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                 | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 166                                                                               | 1165                                                                              | 83                                                                                | 41                                                                                | 1394                                                                              | 61                                                                                | 81                                                                                 | 0                                                                                   | 31                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 166                                                                               | 1248                                                                              | 0                                                                                 | 41                                                                                | 1394                                                                              | 61                                                                                | 81                                                                                 | 31                                                                                  | 0                                                                                   | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 97                                                                                | 97                                                                                |                                                                                   | 14                                                                                | 97                                                                                 |                                                                                     | 97                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                | Right                                                                               |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                |                                                                                     | Perm                                                                                |
| Protected Phases           | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                 | 8                                                                                  |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     | 4                                                                                   |
| Detector Phase             | 5                                                                                 | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 | 6                                                                                 | 8                                                                                  | 8                                                                                   |                                                                                     | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 11.2                                                                              | 31.3                                                                              |                                                                                   | 31.3                                                                              | 31.3                                                                              | 31.3                                                                              | 31.2                                                                               | 31.2                                                                                |                                                                                     | 31.2                                                                                | 31.2                                                                                | 31.2                                                                                |
| Total Split (s)         | 20.0                                                                              | 97.0                                                                              |                                                                                   | 77.0                                                                              | 77.0                                                                              | 77.0                                                                              | 33.0                                                                               | 33.0                                                                                |                                                                                     | 33.0                                                                                | 33.0                                                                                | 33.0                                                                                |
| Total Split (%)         | 15.4%                                                                             | 74.6%                                                                             |                                                                                   | 59.2%                                                                             | 59.2%                                                                             | 59.2%                                                                             | 25.4%                                                                              | 25.4%                                                                               |                                                                                     | 25.4%                                                                               | 25.4%                                                                               | 25.4%                                                                               |
| Maximum Green (s)       | 13.8                                                                              | 90.7                                                                              |                                                                                   | 70.7                                                                              | 70.7                                                                              | 70.7                                                                              | 26.8                                                                               | 26.8                                                                                |                                                                                     | 26.8                                                                                | 26.8                                                                                | 26.8                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.3                                                                                | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.5                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                               | 2.6                                                                               | 2.6                                                                               | 2.9                                                                                | 2.9                                                                                 |                                                                                     | 2.9                                                                                 | 2.9                                                                                 | 2.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.2                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               | 6.3                                                                               | 6.2                                                                                | 6.2                                                                                 |                                                                                     | 6.2                                                                                 | 6.2                                                                                 | 6.2                                                                                 |
| Lead/Lag                | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               |                                                                                   |                                                                                   | Lag                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | C-Max                                                                             |                                                                                   | C-Max                                                                             | C-Max                                                                             | C-Max                                                                             | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   | 18.0                                                                              |                                                                                   | 18.0                                                                              | 18.0                                                                              | 18.0                                                                              | 18.0                                                                               | 18.0                                                                                |                                                                                     | 18.0                                                                                | 18.0                                                                                | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 102.0                                                                             | 101.9                                                                             |                                                                                   | 86.0                                                                              | 86.0                                                                              | 86.0                                                                              | 15.6                                                                               | 15.6                                                                                |                                                                                     | 15.6                                                                                |                                                                                     | 15.6                                                                                |
| Actuated g/C Ratio      | 0.78                                                                              | 0.78                                                                              |                                                                                   | 0.66                                                                              | 0.66                                                                              | 0.66                                                                              | 0.12                                                                               | 0.12                                                                                |                                                                                     | 0.12                                                                                |                                                                                     | 0.12                                                                                |
| v/c Ratio               | 0.55                                                                              | 0.46                                                                              |                                                                                   | 0.15                                                                              | 0.60                                                                              | 0.06                                                                              | 0.49                                                                               | 0.11                                                                                |                                                                                     | 0.58                                                                                |                                                                                     | 0.19                                                                                |
| Control Delay           | 21.8                                                                              | 8.8                                                                               |                                                                                   | 2.4                                                                               | 5.1                                                                               | 0.1                                                                               | 62.0                                                                               | 0.7                                                                                 |                                                                                     | 66.9                                                                                |                                                                                     | 1.2                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay             | 21.8                                                                              | 8.8                                                                               |                                                                                   | 2.4                                                                               | 5.1                                                                               | 0.1                                                                               | 62.0                                                                               | 0.7                                                                                 |                                                                                     | 66.9                                                                                |                                                                                     | 1.2                                                                                 |
| LOS                     | C                                                                                 | A                                                                                 |                                                                                   | A                                                                                 | A                                                                                 | A                                                                                 | E                                                                                  | A                                                                                   |                                                                                     | E                                                                                   |                                                                                     | A                                                                                   |
| Approach Delay          |                                                                                   | 10.3                                                                              |                                                                                   |                                                                                   | 4.8                                                                               |                                                                                   |                                                                                    | 45.1                                                                                |                                                                                     |                                                                                     | 38.9                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Queue Length 50th (m)   | 11.9                                                                              | 35.0                                                                              |                                                                                   | 0.5                                                                               | 8.4                                                                               | 0.1                                                                               | 18.3                                                                               | 0.0                                                                                 |                                                                                     | 21.6                                                                                |                                                                                     | 0.0                                                                                 |
| Queue Length 95th (m)   | m45.6                                                                             | 107.0                                                                             |                                                                                   | m0.8                                                                              | 9.8                                                                               | m0.0                                                                              | 30.7                                                                               | 0.0                                                                                 |                                                                                     | 34.9                                                                                |                                                                                     | 0.0                                                                                 |
| Internal Link Dist (m)  |                                                                                   | 273.5                                                                             |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                    | 235.5                                                                               |                                                                                     |                                                                                     | 213.4                                                                               |                                                                                     |
| Turn Bay Length (m)     | 75.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 180.0                                                                             |                                                                                    |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     | 40.0                                                                                |
| Base Capacity (vph)     | 356                                                                               | 2740                                                                              |                                                                                   | 272                                                                               | 2315                                                                              | 1038                                                                              | 285                                                                                | 410                                                                                 |                                                                                     | 280                                                                                 |                                                                                     | 483                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       | 0.47                                                                              | 0.46                                                                              |                                                                                   | 0.15                                                                              | 0.60                                                                              | 0.06                                                                              | 0.28                                                                               | 0.08                                                                                |                                                                                     | 0.34                                                                                |                                                                                     | 0.14                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 114 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 10.4

Intersection LOS: B

Intersection Capacity Utilization 79.5%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Hazeldean & Roger Griffiths



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 1                                                                                 | 82                                                                                | 1063                                                                              | 33                                                                                | 109                                                                               | 1344                                                                              | 212                                                                                | 26                                                                                  | 2                                                                                   | 56                                                                                  | 177                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 1                                                                                 | 82                                                                                | 1063                                                                              | 33                                                                                | 109                                                                               | 1344                                                                              | 212                                                                                | 26                                                                                  | 2                                                                                   | 56                                                                                  | 177                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 80.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 105.0                                                                              | 55.0                                                                                |                                                                                     | 0.0                                                                                 | 35.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   |                                                                                     | 0                                                                                   | 2                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 60.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                    | 35.0                                                                                |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.97                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.95                                                                               | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                | 0.98                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.995                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                              |                                                                                     | 0.855                                                                               |                                                                                     |                                                                                     | 0.851                                                                               |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1768                                                                              | 3514                                                                              | 0                                                                                 | 1701                                                                              | 3537                                                                              | 1582                                                                               | 1406                                                                                | 1561                                                                                | 0                                                                                   | 3431                                                                                | 1553                                                                                |
| Flt Permitted              |                                                                                   | 0.118                                                                             |                                                                                   |                                                                                   | 0.174                                                                             |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 220                                                                               | 3514                                                                              | 0                                                                                 | 312                                                                               | 3537                                                                              | 1510                                                                               | 1397                                                                                | 1561                                                                                | 0                                                                                   | 3389                                                                                | 1553                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   |                                                                                   | 207                                                                                |                                                                                     | 56                                                                                  |                                                                                     |                                                                                     | 143                                                                                 |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                    |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |
| Link Distance (m)          |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                   | 150.7                                                                             |                                                                                    |                                                                                     | 289.2                                                                               |                                                                                     |                                                                                     | 233.8                                                                               |
| Travel Time (s)            |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                    |                                                                                     | 20.8                                                                                |                                                                                     |                                                                                     | 16.8                                                                                |
| Confl. Peds. (#/hr)        |                                                                                   | 10                                                                                |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 10                                                                                 | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 5%                                                                                | 1%                                                                                | 1%                                                                                 | 27%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 1                                                                                 | 82                                                                                | 1063                                                                              | 33                                                                                | 109                                                                               | 1344                                                                              | 212                                                                                | 26                                                                                  | 2                                                                                   | 56                                                                                  | 177                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 83                                                                                | 1096                                                                              | 0                                                                                 | 109                                                                               | 1344                                                                              | 212                                                                                | 26                                                                                  | 58                                                                                  | 0                                                                                   | 177                                                                                 | 144                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | R NA                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                               | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                    |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                    |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                 | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                  | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                              | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                                | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                                | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                    |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                    |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                    |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | pm+pt                                                                             | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                | Perm                                                                               | Prot                                                                                | NA                                                                                  |                                                                                     | Prot                                                                                | NA                                                                                  |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                    | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |
| Permitted Phases           | 2                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 | 6                                                                                  | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |      |
|----------------------------|------|
| Lane Group                 | SBR  |
| Lane Configurations        |      |
| Traffic Volume (vph)       | 143  |
| Future Volume (vph)        | 143  |
| Ideal Flow (vphpl)         | 1800 |
| Storage Length (m)         | 0.0  |
| Storage Lanes              | 0    |
| Taper Length (m)           |      |
| Lane Util. Factor          | 1.00 |
| Ped Bike Factor            |      |
| Frt                        |      |
| Flt Protected              |      |
| Satd. Flow (prot)          | 0    |
| Flt Permitted              |      |
| Satd. Flow (perm)          | 0    |
| Right Turn on Red          | Yes  |
| Satd. Flow (RTOR)          |      |
| Link Speed (k/h)           |      |
| Link Distance (m)          |      |
| Travel Time (s)            |      |
| Confl. Peds. (#/hr)        | 5    |
| Peak Hour Factor           | 1.00 |
| Heavy Vehicles (%)         | 1%   |
| Adj. Flow (vph)            | 143  |
| Shared Lane Traffic (%)    |      |
| Lane Group Flow (vph)      | 0    |
| Enter Blocked Intersection | No   |
| Lane Alignment             | R NA |
| Median Width(m)            |      |
| Link Offset(m)             |      |
| Crosswalk Width(m)         |      |
| Two way Left Turn Lane     |      |
| Headway Factor             | 1.01 |
| Turning Speed (k/h)        | 14   |
| Number of Detectors        |      |
| Detector Template          |      |
| Leading Detector (m)       |      |
| Trailing Detector (m)      |      |
| Detector 1 Position(m)     |      |
| Detector 1 Size(m)         |      |
| Detector 1 Type            |      |
| Detector 1 Channel         |      |
| Detector 1 Extend (s)      |      |
| Detector 1 Queue (s)       |      |
| Detector 1 Delay (s)       |      |
| Detector 2 Position(m)     |      |
| Detector 2 Size(m)         |      |
| Detector 2 Type            |      |
| Detector 2 Channel         |      |
| Detector 2 Extend (s)      |      |
| Turn Type                  |      |
| Protected Phases           |      |
| Permitted Phases           |      |
| Detector Phase             |      |
| Switch Phase               |      |

3: Mantra/Tillage & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2029 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 10.0                                                                              | 10.0                                                                               | 5.0                                                                                 | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 10.0                                                                                |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 31.3                                                                              |                                                                                   | 11.1                                                                              | 31.3                                                                              | 31.3                                                                               | 11.5                                                                                | 31.5                                                                                |                                                                                     | 11.5                                                                                | 31.5                                                                                |
| Total Split (s)         | 17.0                                                                              | 17.0                                                                              | 53.0                                                                              |                                                                                   | 17.0                                                                              | 53.0                                                                              | 53.0                                                                               | 28.0                                                                                | 32.0                                                                                |                                                                                     | 28.0                                                                                | 32.0                                                                                |
| Total Split (%)         | 13.1%                                                                             | 13.1%                                                                             | 40.8%                                                                             |                                                                                   | 13.1%                                                                             | 40.8%                                                                             | 40.8%                                                                              | 21.5%                                                                               | 24.6%                                                                               |                                                                                     | 21.5%                                                                               | 24.6%                                                                               |
| Maximum Green (s)       | 10.9                                                                              | 10.9                                                                              | 46.7                                                                              |                                                                                   | 10.9                                                                              | 46.7                                                                              | 46.7                                                                               | 21.5                                                                                | 25.5                                                                                |                                                                                     | 21.5                                                                                | 25.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.3                                                                                 | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.6                                                                               |                                                                                   | 2.4                                                                               | 2.6                                                                               | 2.6                                                                                | 3.2                                                                                 | 3.2                                                                                 |                                                                                     | 3.2                                                                                 | 3.2                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.3                                                                               |                                                                                   | 6.1                                                                               | 6.3                                                                               | 6.3                                                                                | 6.5                                                                                 | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lag                                                                               | Lag                                                                                | Lag                                                                                 | Lead                                                                                |                                                                                     | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             | C-Max                                                                              | None                                                                                | None                                                                                |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                                |                                                                                     | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 18.0                                                                              | 18.0                                                                               |                                                                                     | 18.0                                                                                |                                                                                     |                                                                                     | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 10                                                                                | 10                                                                                 |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 80.9                                                                              | 72.8                                                                              |                                                                                   | 84.7                                                                              | 74.7                                                                              | 74.7                                                                               | 10.6                                                                                | 13.0                                                                                |                                                                                     | 12.3                                                                                | 16.4                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.62                                                                              | 0.56                                                                              |                                                                                   | 0.65                                                                              | 0.57                                                                              | 0.57                                                                               | 0.08                                                                                | 0.10                                                                                |                                                                                     | 0.09                                                                                | 0.13                                                                                |
| v/c Ratio               |                                                                                   | 0.36                                                                              | 0.56                                                                              |                                                                                   | 0.36                                                                              | 0.66                                                                              | 0.22                                                                               | 0.23                                                                                | 0.28                                                                                |                                                                                     | 0.55                                                                                | 0.45                                                                                |
| Control Delay           |                                                                                   | 14.9                                                                              | 25.1                                                                              |                                                                                   | 12.7                                                                              | 23.8                                                                              | 3.6                                                                                | 58.6                                                                                | 16.3                                                                                |                                                                                     | 62.4                                                                                | 12.4                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 14.9                                                                              | 25.1                                                                              |                                                                                   | 12.7                                                                              | 23.8                                                                              | 3.6                                                                                | 58.6                                                                                | 16.3                                                                                |                                                                                     | 62.4                                                                                | 12.4                                                                                |
| LOS                     |                                                                                   | B                                                                                 | C                                                                                 |                                                                                   | B                                                                                 | C                                                                                 | A                                                                                  | E                                                                                   | B                                                                                   |                                                                                     | E                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 24.4                                                                              |                                                                                   |                                                                                   | 20.5                                                                              |                                                                                    |                                                                                     | 29.4                                                                                |                                                                                     |                                                                                     | 39.9                                                                                |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                    |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | D                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 10.5                                                                              | 112.8                                                                             |                                                                                   | 8.0                                                                               | 108.5                                                                             | 0.5                                                                                | 5.8                                                                                 | 0.5                                                                                 |                                                                                     | 20.9                                                                                | 0.2                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 16.2                                                                              | 163.4                                                                             |                                                                                   | 20.8                                                                              | #200.0                                                                            | 14.4                                                                               | 13.9                                                                                | 11.2                                                                                |                                                                                     | 31.0                                                                                | 16.3                                                                                |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                   | 126.7                                                                             |                                                                                    |                                                                                     | 265.2                                                                               |                                                                                     |                                                                                     | 209.8                                                                               |
| Turn Bay Length (m)     |                                                                                   | 80.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 105.0                                                                              | 55.0                                                                                |                                                                                     |                                                                                     | 35.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 273                                                                               | 1970                                                                              |                                                                                   | 333                                                                               | 2032                                                                              | 955                                                                                | 232                                                                                 | 351                                                                                 |                                                                                     | 567                                                                                 | 423                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.30                                                                              | 0.56                                                                              |                                                                                   | 0.33                                                                              | 0.66                                                                              | 0.22                                                                               | 0.11                                                                                | 0.17                                                                                |                                                                                     | 0.31                                                                                | 0.34                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 24.0

Intersection LOS: C

Intersection Capacity Utilization 81.0%

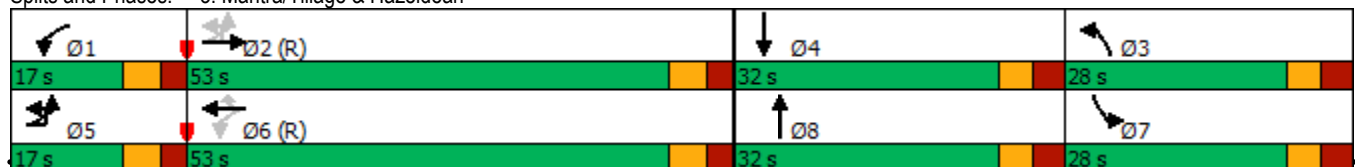
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Mantra/Tillage & Hazeldean







| Lane Group              | SBR |
|-------------------------|-----|
| Minimum Initial (s)     |     |
| Minimum Split (s)       |     |
| Total Split (s)         |     |
| Total Split (%)         |     |
| Maximum Green (s)       |     |
| Yellow Time (s)         |     |
| All-Red Time (s)        |     |
| Lost Time Adjust (s)    |     |
| Total Lost Time (s)     |     |
| Lead/Lag                |     |
| Lead-Lag Optimize?      |     |
| Vehicle Extension (s)   |     |
| Recall Mode             |     |
| Walk Time (s)           |     |
| Flash Dont Walk (s)     |     |
| Pedestrian Calls (#/hr) |     |
| Act Effct Green (s)     |     |
| Actuated g/C Ratio      |     |
| v/c Ratio               |     |
| Control Delay           |     |
| Queue Delay             |     |
| Total Delay             |     |
| LOS                     |     |
| Approach Delay          |     |
| Approach LOS            |     |
| Queue Length 50th (m)   |     |
| Queue Length 95th (m)   |     |
| Internal Link Dist (m)  |     |
| Turn Bay Length (m)     |     |
| Base Capacity (vph)     |     |
| Starvation Cap Reductn  |     |
| Spillback Cap Reductn   |     |
| Storage Cap Reductn     |     |
| Reduced v/c Ratio       |     |
| Intersection Summary    |     |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2029 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 431                                                                               | 761                                                                               | 262                                                                               | 14                                                                                | 301                                                                               | 956                                                                                | 308                                                                                 | 299                                                                                 | 794                                                                                 | 208                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 2                                                                                 | 431                                                                               | 761                                                                               | 262                                                                               | 14                                                                                | 301                                                                               | 956                                                                                | 308                                                                                 | 299                                                                                 | 794                                                                                 | 208                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.95                                                                              |                                                                                   | 0.99                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 3364                                                                              | 3537                                                                              | 1551                                                                              | 0                                                                                 | 3398                                                                              | 3537                                                                               | 1551                                                                                | 3397                                                                                | 3468                                                                                | 1567                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 3358                                                                              | 3537                                                                              | 1481                                                                              | 0                                                                                 | 3363                                                                              | 3537                                                                               | 1521                                                                                | 3387                                                                                | 3468                                                                                | 1527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 235                                                                               |                                                                                   |                                                                                   |                                                                                    | 174                                                                                 |                                                                                     |                                                                                     | 150                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 644.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 38.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 24                                                                                |                                                                                   | 24                                                                                |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 3%                                                                                  | 2%                                                                                  | 3%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 431                                                                               | 761                                                                               | 262                                                                               | 14                                                                                | 301                                                                               | 956                                                                                | 308                                                                                 | 299                                                                                 | 794                                                                                 | 208                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 433                                                                               | 761                                                                               | 262                                                                               | 0                                                                                 | 315                                                                               | 956                                                                                | 308                                                                                 | 299                                                                                 | 794                                                                                 | 208                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2029 Total Traffic

|                            |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                 | SBL                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations        |  |  |  |
| Traffic Volume (vph)       | 315                                                                               | 916                                                                               | 425                                                                               |
| Future Volume (vph)        | 315                                                                               | 916                                                                               | 425                                                                               |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)         | 155.0                                                                             |                                                                                   | 200.0                                                                             |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              |
| Ped Bike Factor            | 0.99                                                                              |                                                                                   | 0.98                                                                              |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)          | 3431                                                                              | 3502                                                                              | 1567                                                                              |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)          | 3407                                                                              | 3502                                                                              | 1537                                                                              |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 264                                                                               |
| Link Speed (k/h)           |                                                                                   | 70                                                                                |                                                                                   |
| Link Distance (m)          |                                                                                   | 316.2                                                                             |                                                                                   |
| Travel Time (s)            |                                                                                   | 16.3                                                                              |                                                                                   |
| Confl. Peds. (#/hr)        | 10                                                                                |                                                                                   | 5                                                                                 |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 2%                                                                                |
| Adj. Flow (vph)            | 315                                                                               | 916                                                                               | 425                                                                               |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)      | 316                                                                               | 916                                                                               | 425                                                                               |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)            |                                                                                   | 10.0                                                                              |                                                                                   |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 | 1                                                                                 |
| Detector Template          | Left                                                                              | Thru                                                                              | Right                                                                             |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              |
| Protected Phases           | 1                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   | 6                                                                                 |
| Detector Phase             | 1                                                                                 | 6                                                                                 | 6                                                                                 |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2029 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                               | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                               | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 23.0                                                                              | 23.0                                                                              | 42.0                                                                              | 42.0                                                                              | 23.0                                                                              | 23.0                                                                              | 42.0                                                                               | 42.0                                                                                | 18.0                                                                                | 37.0                                                                                | 37.0                                                                                | 18.0                                                                                |
| Total Split (%)         | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                             | 35.0%                                                                             | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                              | 35.0%                                                                               | 15.0%                                                                               | 30.8%                                                                               | 30.8%                                                                               | 15.0%                                                                               |
| Maximum Green (s)       | 16.5                                                                              | 16.5                                                                              | 35.5                                                                              | 35.5                                                                              | 16.5                                                                              | 16.5                                                                              | 35.5                                                                               | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                | 11.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 24                                                                                | 24                                                                                |                                                                                   |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 16.5                                                                              | 36.2                                                                              | 36.2                                                                              |                                                                                   | 15.2                                                                              | 34.9                                                                               | 34.9                                                                                | 11.8                                                                                | 30.5                                                                                | 30.5                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.30                                                                              | 0.30                                                                              |                                                                                   | 0.13                                                                              | 0.29                                                                               | 0.29                                                                                | 0.10                                                                                | 0.25                                                                                | 0.25                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.94                                                                              | 0.71                                                                              | 0.43                                                                              |                                                                                   | 0.73                                                                              | 0.93                                                                               | 0.55                                                                                | 0.89                                                                                | 0.90                                                                                | 0.42                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 80.3                                                                              | 41.9                                                                              | 8.2                                                                               |                                                                                   | 51.1                                                                              | 65.9                                                                               | 30.6                                                                                | 88.3                                                                                | 50.6                                                                                | 8.7                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 80.3                                                                              | 41.9                                                                              | 8.2                                                                               |                                                                                   | 51.1                                                                              | 65.9                                                                               | 30.6                                                                                | 88.3                                                                                | 50.6                                                                                | 8.9                                                                                 |                                                                                     |
| LOS                     |                                                                                   | F                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | E                                                                                  | C                                                                                   | F                                                                                   | D                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 47.3                                                                              |                                                                                   |                                                                                   |                                                                                   | 56.1                                                                               |                                                                                     |                                                                                     | 52.6                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | E                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 48.5                                                                              | 77.7                                                                              | 4.2                                                                               |                                                                                   | 34.2                                                                              | 109.9                                                                              | 35.1                                                                                | 27.9                                                                                | 88.4                                                                                | 13.5                                                                                |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | #76.0                                                                             | 98.3                                                                              | 23.2                                                                              |                                                                                   | 48.0                                                                              | #144.4                                                                             | 70.1                                                                                | #59.2                                                                               | #120.3                                                                              | 7.1                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 620.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                              |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 462                                                                               | 1067                                                                              | 610                                                                               |                                                                                   | 467                                                                               | 1046                                                                               | 572                                                                                 | 335                                                                                 | 881                                                                                 | 499                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 35                                                                                  |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.94                                                                              | 0.71                                                                              | 0.43                                                                              |                                                                                   | 0.67                                                                              | 0.91                                                                               | 0.54                                                                                | 0.89                                                                                | 0.90                                                                                | 0.45                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 57.6

Intersection LOS: E

Intersection Capacity Utilization 99.9%

ICU Level of Service F

Analysis Period (min) 15

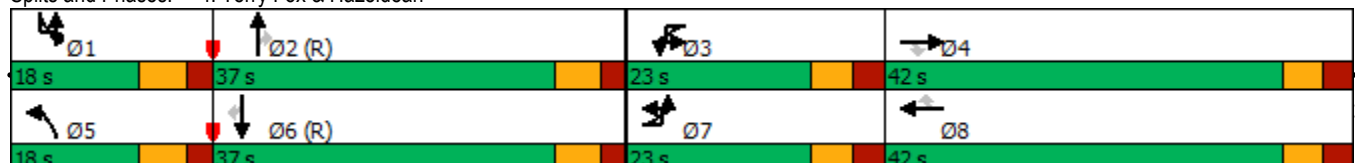
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

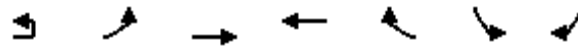
Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean

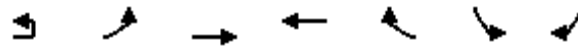




| Lane Group              | SBL   | SBT    | SBR   |
|-------------------------|-------|--------|-------|
| Switch Phase            |       |        |       |
| Minimum Initial (s)     | 5.0   | 10.0   | 10.0  |
| Minimum Split (s)       | 11.5  | 35.5   | 35.5  |
| Total Split (s)         | 18.0  | 37.0   | 37.0  |
| Total Split (%)         | 15.0% | 30.8%  | 30.8% |
| Maximum Green (s)       | 11.5  | 30.5   | 30.5  |
| Yellow Time (s)         | 4.2   | 4.2    | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3    | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0    | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5    | 6.5   |
| Lead/Lag                | Lead  | Lag    | Lag   |
| Lead-Lag Optimize?      |       |        |       |
| Vehicle Extension (s)   | 3.0   | 3.0    | 3.0   |
| Recall Mode             | None  | C-Max  | C-Max |
| Walk Time (s)           |       | 7.0    | 7.0   |
| Flash Dont Walk (s)     |       | 22.0   | 22.0  |
| Pedestrian Calls (#/hr) |       | 10     | 10    |
| Act Effct Green (s)     | 12.1  | 30.8   | 30.8  |
| Actuated g/C Ratio      | 0.10  | 0.26   | 0.26  |
| v/c Ratio               | 0.91  | 1.02   | 0.72  |
| Control Delay           | 88.2  | 78.0   | 24.9  |
| Queue Delay             | 29.9  | 0.0    | 0.0   |
| Total Delay             | 118.2 | 78.0   | 24.9  |
| LOS                     | F     | E      | C     |
| Approach Delay          |       | 72.0   |       |
| Approach LOS            |       | E      |       |
| Queue Length 50th (m)   | 37.8  | ~94.8  | 18.6  |
| Queue Length 95th (m)   | #63.6 | #145.2 | 77.8  |
| Internal Link Dist (m)  |       | 292.2  |       |
| Turn Bay Length (m)     | 155.0 |        | 200.0 |
| Base Capacity (vph)     | 346   | 898    | 590   |
| Starvation Cap Reductn  | 0     | 0      | 0     |
| Spillback Cap Reductn   | 45    | 0      | 0     |
| Storage Cap Reductn     | 0     | 0      | 0     |
| Reduced v/c Ratio       | 1.05  | 1.02   | 0.72  |
| Intersection Summary    |       |        |       |



| Lane Group                 | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 4     | 78    | 1233  | 1659  | 54    | 99    | 97    |
| Future Volume (vph)        | 4     | 78    | 1233  | 1659  | 54    | 99    | 97    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 35.0  |       |       | 0.0   | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       |       | 0     | 1     | 1     |
| Taper Length (m)           |       | 40.0  |       |       |       | 40.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  |
| Ped Bike Factor            |       |       |       | 1.00  |       | 0.99  | 0.97  |
| Frt                        |       |       |       | 0.995 |       |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1752  | 3537  | 3512  | 0     | 1768  | 1582  |
| Flt Permitted              |       | 0.103 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 190   | 3537  | 3512  | 0     | 1746  | 1533  |
| Right Turn on Red          |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 6     |       |       | 32    |
| Link Speed (k/h)           |       |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 157.6 | 314.8 |       | 401.6 |       |
| Travel Time (s)            |       |       | 9.5   | 18.9  |       | 28.9  |       |
| Confl. Peds. (#/hr)        |       | 17    |       |       | 17    | 10    | 15    |
| Peak Hour Factor           | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 1%    | 2%    | 1%    | 1%    | 1%    | 1%    | 1%    |
| Adj. Flow (vph)            | 4     | 78    | 1233  | 1659  | 54    | 99    | 97    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 82    | 1233  | 1713  | 0     | 99    | 97    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | L NA  | Left  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 8.0   | 4.0   |       | 4.0   |       |
| Link Offset(m)             |       |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 2     |       | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Thru  |       | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 10.0  |       | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 0.6   |       | 2.0   | 2.0   |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | NA    |       | Perm  | Perm  |
| Protected Phases           |       |       | 2     | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       |       |       | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     |       | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |



| Lane Group              | EBU   | EBL   | EBT    | WBT   | WBR | SBL   | SBR   |
|-------------------------|-------|-------|--------|-------|-----|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  | 10.0   | 10.0  |     | 10.0  | 10.0  |
| Minimum Split (s)       | 16.2  | 16.2  | 16.2   | 31.2  |     | 34.1  | 34.1  |
| Total Split (s)         | 86.0  | 86.0  | 86.0   | 86.0  |     | 34.0  | 34.0  |
| Total Split (%)         | 71.7% | 71.7% | 71.7%  | 71.7% |     | 28.3% | 28.3% |
| Maximum Green (s)       | 79.8  | 79.8  | 79.8   | 79.8  |     | 27.9  | 27.9  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7    | 3.7   |     | 3.3   | 3.3   |
| All-Red Time (s)        | 2.5   | 2.5   | 2.5    | 2.5   |     | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0    | 0.0   |     | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.2   | 6.2    | 6.2   |     | 6.1   | 6.1   |
| Lead/Lag                |       |       |        |       |     |       |       |
| Lead-Lag Optimize?      |       |       |        |       |     |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0    | 3.0   |     | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max | C-Max  | C-Max |     | None  | None  |
| Walk Time (s)           |       |       |        | 7.0   |     | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |       |        | 18.0  |     | 21.0  | 21.0  |
| Pedestrian Calls (#/hr) |       |       |        | 17    |     | 15    | 15    |
| Act Effct Green (s)     |       | 90.1  | 90.1   | 90.1  |     | 17.6  | 17.6  |
| Actuated g/C Ratio      |       | 0.75  | 0.75   | 0.75  |     | 0.15  | 0.15  |
| v/c Ratio               |       | 0.58  | 0.46   | 0.65  |     | 0.39  | 0.38  |
| Control Delay           |       | 37.7  | 15.1   | 10.1  |     | 45.8  | 30.6  |
| Queue Delay             |       | 0.0   | 1.6    | 0.0   |     | 0.0   | 0.0   |
| Total Delay             |       | 37.7  | 16.7   | 10.1  |     | 45.8  | 30.6  |
| LOS                     |       | D     | B      | B     |     | D     | C     |
| Approach Delay          |       |       | 18.0   | 10.1  |     | 38.3  |       |
| Approach LOS            |       |       | B      | B     |     | D     |       |
| Queue Length 50th (m)   |       | 8.2   | 92.2   | 62.8  |     | 21.4  | 14.2  |
| Queue Length 95th (m)   |       | m25.3 | m155.1 | 140.8 |     | m28.2 | m21.6 |
| Internal Link Dist (m)  |       |       | 133.6  | 290.8 |     | 377.6 |       |
| Turn Bay Length (m)     |       | 35.0  |        |       |     | 30.0  |       |
| Base Capacity (vph)     |       | 142   | 2655   | 2638  |     | 405   | 380   |
| Starvation Cap Reductn  |       | 0     | 1178   | 0     |     | 0     | 0     |
| Spillback Cap Reductn   |       | 0     | 0      | 0     |     | 0     | 0     |
| Storage Cap Reductn     |       | 0     | 0      | 0     |     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.58  | 0.83   | 0.65  |     | 0.24  | 0.26  |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 10 (8%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 15.1

Intersection LOS: B

Intersection Capacity Utilization 88.3%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Hazeldean & Edgewater



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                  | 1322                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1641                                                                                |
| Future Volume (vph)        | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                  | 1322                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1641                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.98                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                    | 0.993                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1669                                                                              | 1554                                                                              | 0                                                                                 | 1768                                                                              | 1560                                                                              | 0                                                                                 | 1768                                                                               | 3474                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3537                                                                                |
| Flt Permitted              | 0.391                                                                             |                                                                                   |                                                                                   | 0.752                                                                             |                                                                                   |                                                                                   | 0.116                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.122                                                                               |                                                                                     |
| Satd. Flow (perm)          | 684                                                                               | 1554                                                                              | 0                                                                                 | 1391                                                                              | 1560                                                                              | 0                                                                                 | 216                                                                                | 3474                                                                                | 0                                                                                   | 0                                                                                   | 223                                                                                 | 3537                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 128                                                                               |                                                                                   |                                                                                   | 124                                                                               |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                    | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                    | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 7%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 3%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                  | 1322                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1641                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 8                                                                                 | 0                                                                                 | 41                                                                                | 189                                                                               | 0                                                                                 | 2                                                                                  | 1385                                                                                | 0                                                                                   | 0                                                                                   | 165                                                                                 | 1641                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                    | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 29    |
| Future Volume (vph)        | 29    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1551  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1504  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 92    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 3%    |
| Adj. Flow (vph)            | 29    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 29    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

| Lane Group              | EBL   | EBT   | EBR | WBL   | WBT   | WBR | NBL   | NBT   | NBR | SBU   | SBL   | SBT   |
|-------------------------|-------|-------|-----|-------|-------|-----|-------|-------|-----|-------|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  |     | 10.0  | 10.0  |     | 5.0   | 10.0  |     | 5.0   | 5.0   | 10.0  |
| Minimum Split (s)       | 36.5  | 36.5  |     | 36.5  | 36.5  |     | 11.6  | 34.5  |     | 11.6  | 11.6  | 34.5  |
| Total Split (s)         | 37.0  | 37.0  |     | 37.0  | 37.0  |     | 14.0  | 69.0  |     | 14.0  | 14.0  | 69.0  |
| Total Split (%)         | 30.8% | 30.8% |     | 30.8% | 30.8% |     | 11.7% | 57.5% |     | 11.7% | 11.7% | 57.5% |
| Maximum Green (s)       | 30.5  | 30.5  |     | 30.5  | 30.5  |     | 7.4   | 62.5  |     | 7.4   | 7.4   | 62.5  |
| Yellow Time (s)         | 3.3   | 3.3   |     | 3.3   | 3.3   |     | 4.2   | 4.2   |     | 4.2   | 4.2   | 4.2   |
| All-Red Time (s)        | 3.2   | 3.2   |     | 3.2   | 3.2   |     | 2.4   | 2.3   |     | 2.4   | 2.4   | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |       | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5   |     | 6.5   | 6.5   |     | 6.6   | 6.5   |     |       | 6.6   | 6.5   |
| Lead/Lag                |       |       |     |       |       |     | Lead  | Lag   |     | Lead  | Lead  | Lag   |
| Lead-Lag Optimize?      |       |       |     |       |       |     |       |       |     |       |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   |     | 3.0   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |     | None  | None  |     | None  | C-Max |     | None  | None  | C-Max |
| Walk Time (s)           | 7.0   | 7.0   |     | 7.0   | 7.0   |     |       | 7.0   |     |       |       | 7.0   |
| Flash Dont Walk (s)     | 23.0  | 23.0  |     | 23.0  | 23.0  |     |       | 21.0  |     |       |       | 21.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |     | 5     | 5     |     |       | 5     |     |       |       | 5     |
| Act Effct Green (s)     | 15.0  | 15.0  |     | 15.0  | 15.0  |     | 80.6  | 75.1  |     |       | 91.0  | 89.6  |
| Actuated g/C Ratio      | 0.12  | 0.12  |     | 0.12  | 0.12  |     | 0.67  | 0.63  |     |       | 0.76  | 0.75  |
| v/c Ratio               | 0.18  | 0.03  |     | 0.24  | 0.62  |     | 0.01  | 0.64  |     |       | 0.55  | 0.62  |
| Control Delay           | 47.4  | 0.1   |     | 41.0  | 23.3  |     | 5.0   | 8.5   |     |       | 15.1  | 11.2  |
| Queue Delay             | 0.0   | 0.0   |     | 0.0   | 0.0   |     | 0.0   | 0.0   |     |       | 0.0   | 0.0   |
| Total Delay             | 47.4  | 0.1   |     | 41.0  | 23.3  |     | 5.0   | 8.5   |     |       | 15.1  | 11.2  |
| LOS                     | D     | A     |     | D     | C     |     | A     | A     |     |       | B     | B     |
| Approach Delay          |       | 31.0  |     |       | 26.5  |     |       | 8.5   |     |       |       | 11.3  |
| Approach LOS            |       | C     |     |       | C     |     |       | A     |     |       |       | B     |
| Queue Length 50th (m)   | 3.1   | 0.0   |     | 8.8   | 16.6  |     | 0.0   | 42.3  |     |       | 6.4   | 55.8  |
| Queue Length 95th (m)   | 7.9   | 0.0   |     | m13.2 | 30.1  |     | m0.2  | 31.1  |     |       | #25.9 | 186.1 |
| Internal Link Dist (m)  |       | 193.1 |     |       | 258.1 |     |       | 229.3 |     |       |       | 336.0 |
| Turn Bay Length (m)     |       |       |     | 65.0  |       |     |       |       |     |       | 55.0  |       |
| Base Capacity (vph)     | 173   | 490   |     | 353   | 488   |     | 244   | 2177  |     |       | 298   | 2640  |
| Starvation Cap Reductn  | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     |       | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     |       | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |     | 0     | 0     |     | 0     | 0     |     |       | 0     | 0     |
| Reduced v/c Ratio       | 0.09  | 0.02  |     | 0.12  | 0.39  |     | 0.01  | 0.64  |     |       | 0.55  | 0.62  |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 46 (38%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 11.3

Intersection LOS: B

Intersection Capacity Utilization 83.4%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 69.0  |
| Total Split (%)         | 57.5% |
| Maximum Green (s)       | 62.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                | Lag   |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 89.6  |
| Actuated g/C Ratio      | 0.75  |
| v/c Ratio               | 0.03  |
| Control Delay           | 0.0   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.0   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.0   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1145  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.03  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBU                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |  |                                                                                     |                                                                                     |  |
| Traffic Volume (vph)       | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1207                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Future Volume (vph)        | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1207                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 35.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 |                                                                                    | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (m)           | 25.0                                                                              |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                    | 10.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                               | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor            | 0.99                                                                              | 0.98                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                    |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                    |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 1768                                                                              | 1552                                                                              | 0                                                                                 | 1488                                                                              | 1552                                                                              | 0                                                                                 | 0                                                                                  | 1768                                                                                | 3457                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                |
| Flt Permitted              | 0.756                                                                             |                                                                                   |                                                                                   | 0.740                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.135                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.208                                                                               |
| Satd. Flow (perm)          | 1398                                                                              | 1552                                                                              | 0                                                                                 | 1152                                                                              | 1552                                                                              | 0                                                                                 | 0                                                                                  | 251                                                                                 | 3457                                                                                | 0                                                                                   | 0                                                                                   | 387                                                                                 |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 126                                                                               |                                                                                   |                                                                                   | 153                                                                               |                                                                                   |                                                                                    |                                                                                     | 3                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   | 207.5                                                                             |                                                                                   |                                                                                   | 88.7                                                                              |                                                                                   |                                                                                    |                                                                                     | 316.2                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   | 14.9                                                                              |                                                                                   |                                                                                   | 10.6                                                                              |                                                                                   |                                                                                    |                                                                                     | 16.3                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 20%                                                                               | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 3%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1207                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 26                                                                                | 0                                                                                 | 5                                                                                 | 3                                                                                 | 0                                                                                 | 0                                                                                  | 39                                                                                  | 1231                                                                                | 0                                                                                   | 0                                                                                   | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                               | Left                                                                                | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 12.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                 | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙    |
|----------------------------|-------|------|
| Lane Group                 | SBT   | SBR  |
| Lane Configurations        | ↑↑    |      |
| Traffic Volume (vph)       | 1485  | 1    |
| Future Volume (vph)        | 1485  | 1    |
| Ideal Flow (vphpl)         | 1800  | 1800 |
| Storage Length (m)         |       | 0.0  |
| Storage Lanes              |       | 0    |
| Taper Length (m)           |       |      |
| Lane Util. Factor          | 0.95  | 0.95 |
| Ped Bike Factor            | 1.00  |      |
| Frt                        |       |      |
| Flt Protected              |       |      |
| Satd. Flow (prot)          | 3537  | 0    |
| Flt Permitted              |       |      |
| Satd. Flow (perm)          | 3537  | 0    |
| Right Turn on Red          |       | Yes  |
| Satd. Flow (RTOR)          |       |      |
| Link Speed (k/h)           | 70    |      |
| Link Distance (m)          | 253.3 |      |
| Travel Time (s)            | 13.0  |      |
| Confl. Peds. (#/hr)        |       | 5    |
| Peak Hour Factor           | 1.00  | 1.00 |
| Heavy Vehicles (%)         | 1%    | 1%   |
| Adj. Flow (vph)            | 1485  | 1    |
| Shared Lane Traffic (%)    |       |      |
| Lane Group Flow (vph)      | 1486  | 0    |
| Enter Blocked Intersection | No    | No   |
| Lane Alignment             | Left  | R NA |
| Median Width(m)            | 12.0  |      |
| Link Offset(m)             | 0.0   |      |
| Crosswalk Width(m)         | 5.0   |      |
| Two way Left Turn Lane     |       |      |
| Headway Factor             | 1.01  | 1.01 |
| Turning Speed (k/h)        |       | 14   |
| Number of Detectors        | 2     |      |
| Detector Template          | Thru  |      |
| Leading Detector (m)       | 10.0  |      |
| Trailing Detector (m)      | 0.0   |      |
| Detector 1 Position(m)     | 0.0   |      |
| Detector 1 Size(m)         | 0.6   |      |
| Detector 1 Type            | CI+Ex |      |
| Detector 1 Channel         |       |      |
| Detector 1 Extend (s)      | 0.0   |      |
| Detector 1 Queue (s)       | 0.0   |      |
| Detector 1 Delay (s)       | 0.0   |      |
| Detector 2 Position(m)     | 9.4   |      |
| Detector 2 Size(m)         | 0.6   |      |
| Detector 2 Type            | CI+Ex |      |
| Detector 2 Channel         |       |      |
| Detector 2 Extend (s)      | 0.0   |      |
| Turn Type                  | NA    |      |
| Protected Phases           | 6     |      |
| Permitted Phases           |       |      |
| Detector Phase             | 6     |      |
| Switch Phase               |       |      |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBU                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 5.0                                                                                | 5.0                                                                                 | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.2                                                                              | 32.2                                                                              |                                                                                   | 11.5                                                                               | 11.5                                                                                | 32.5                                                                                |                                                                                     | 11.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                | 72.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                |
| Total Split (%)         | 27.5%                                                                             | 27.5%                                                                             |                                                                                   | 27.5%                                                                             | 27.5%                                                                             |                                                                                   | 12.5%                                                                              | 12.5%                                                                               | 60.0%                                                                               |                                                                                     | 12.5%                                                                               | 12.5%                                                                               |
| Maximum Green (s)       | 26.8                                                                              | 26.8                                                                              |                                                                                   | 26.8                                                                              | 26.8                                                                              |                                                                                   | 8.5                                                                                | 8.5                                                                                 | 65.5                                                                                |                                                                                     | 8.5                                                                                 | 8.5                                                                                 |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Total Lost Time (s)     | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.2                                                                               | 6.2                                                                               |                                                                                   |                                                                                    | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |                                                                                     | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lead                                                                                | Lag                                                                                 |                                                                                     | Lead                                                                                | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | None                                                                                | C-Max                                                                               |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 7.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Flash Dont Walk (s)     | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                              | 19.0                                                                              |                                                                                   |                                                                                    |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                    |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Act Effct Green (s)     | 13.2                                                                              | 13.2                                                                              |                                                                                   | 13.2                                                                              | 13.2                                                                              |                                                                                   |                                                                                    | 99.6                                                                                | 100.7                                                                               |                                                                                     |                                                                                     | 96.1                                                                                |
| Actuated g/C Ratio      | 0.11                                                                              | 0.11                                                                              |                                                                                   | 0.11                                                                              | 0.11                                                                              |                                                                                   |                                                                                    | 0.83                                                                                | 0.84                                                                                |                                                                                     |                                                                                     | 0.80                                                                                |
| v/c Ratio               | 0.02                                                                              | 0.09                                                                              |                                                                                   | 0.04                                                                              | 0.01                                                                              |                                                                                   |                                                                                    | 0.14                                                                                | 0.42                                                                                |                                                                                     |                                                                                     | 0.01                                                                                |
| Control Delay           | 43.0                                                                              | 0.7                                                                               |                                                                                   | 43.8                                                                              | 0.0                                                                               |                                                                                   |                                                                                    | 2.8                                                                                 | 2.4                                                                                 |                                                                                     |                                                                                     | 5.5                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Total Delay             | 43.0                                                                              | 0.7                                                                               |                                                                                   | 43.8                                                                              | 0.0                                                                               |                                                                                   |                                                                                    | 2.8                                                                                 | 2.4                                                                                 |                                                                                     |                                                                                     | 5.5                                                                                 |
| LOS                     | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | A                                                                                 |                                                                                   |                                                                                    | A                                                                                   | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |
| Approach Delay          |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 27.4                                                                              |                                                                                   |                                                                                    |                                                                                     | 2.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 50th (m)   | 0.6                                                                               | 0.0                                                                               |                                                                                   | 1.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 1.0                                                                                 | 16.5                                                                                |                                                                                     |                                                                                     | 0.1                                                                                 |
| Queue Length 95th (m)   | 2.9                                                                               | 0.0                                                                               |                                                                                   | 4.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | m1.8                                                                                | m25.7                                                                               |                                                                                     |                                                                                     | m0.4                                                                                |
| Internal Link Dist (m)  |                                                                                   | 183.5                                                                             |                                                                                   |                                                                                   | 64.7                                                                              |                                                                                   |                                                                                    |                                                                                     | 292.2                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Turn Bay Length (m)     | 35.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |
| Base Capacity (vph)     | 312                                                                               | 444                                                                               |                                                                                   | 257                                                                               | 465                                                                               |                                                                                   |                                                                                    | 315                                                                                 | 2902                                                                                |                                                                                     |                                                                                     | 413                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       | 0.01                                                                              | 0.06                                                                              |                                                                                   | 0.02                                                                              | 0.01                                                                              |                                                                                   |                                                                                    | 0.12                                                                                | 0.42                                                                                |                                                                                     |                                                                                     | 0.01                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 40 (33%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 4.3

Intersection LOS: A

Intersection Capacity Utilization 64.3%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Terry Fox & Tony Graham Rec



|                         | ↓     | ↙   |
|-------------------------|-------|-----|
| Lane Group              | SBT   | SBR |
| Minimum Initial (s)     | 10.0  |     |
| Minimum Split (s)       | 32.5  |     |
| Total Split (s)         | 72.0  |     |
| Total Split (%)         | 60.0% |     |
| Maximum Green (s)       | 65.5  |     |
| Yellow Time (s)         | 4.2   |     |
| All-Red Time (s)        | 2.3   |     |
| Lost Time Adjust (s)    | 0.0   |     |
| Total Lost Time (s)     | 6.5   |     |
| Lead/Lag                | Lag   |     |
| Lead-Lag Optimize?      |       |     |
| Vehicle Extension (s)   | 3.0   |     |
| Recall Mode             | C-Max |     |
| Walk Time (s)           | 7.0   |     |
| Flash Dont Walk (s)     | 19.0  |     |
| Pedestrian Calls (#/hr) | 5     |     |
| Act Effct Green (s)     | 95.4  |     |
| Actuated g/C Ratio      | 0.80  |     |
| v/c Ratio               | 0.53  |     |
| Control Delay           | 5.8   |     |
| Queue Delay             | 0.0   |     |
| Total Delay             | 5.8   |     |
| LOS                     | A     |     |
| Approach Delay          | 5.8   |     |
| Approach LOS            | A     |     |
| Queue Length 50th (m)   | 28.3  |     |
| Queue Length 95th (m)   | 54.0  |     |
| Internal Link Dist (m)  | 229.3 |     |
| Turn Bay Length (m)     |       |     |
| Base Capacity (vph)     | 2810  |     |
| Starvation Cap Reductn  | 0     |     |
| Spillback Cap Reductn   | 0     |     |
| Storage Cap Reductn     | 0     |     |
| Reduced v/c Ratio       | 0.53  |     |
| Intersection Summary    |       |     |

8: Terry Fox & Sobey's  
PM Peak Hour

560 Hazeldean Road  
2029 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 990                                                                                 | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1354                                                                                |
| Future Volume (vph)        | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 990                                                                                 | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1354                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 10.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 30.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.91                                                                                | 0.91                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.917                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.989                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.991                                                                               |
| Flt Protected              |                                                                                   | 0.984                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1658                                                                              | 0                                                                                 | 0                                                                                 | 1776                                                                              | 1582                                                                              | 1768                                                                               | 5013                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3495                                                                                |
| Flt Permitted              |                                                                                   | 0.864                                                                             |                                                                                   |                                                                                   | 0.602                                                                             |                                                                                   | 0.147                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.247                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1453                                                                              | 0                                                                                 | 0                                                                                 | 1114                                                                              | 1552                                                                              | 274                                                                                | 5013                                                                                | 0                                                                                   | 0                                                                                   | 458                                                                                 | 3495                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 103                                                                               |                                                                                    | 21                                                                                  |                                                                                     |                                                                                     |                                                                                     | 10                                                                                  |
| Link Speed (k/h)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 132.0                                                                             |                                                                                   |                                                                                   | 152.6                                                                             |                                                                                   |                                                                                    | 140.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 142.7                                                                               |
| Travel Time (s)            |                                                                                   | 15.8                                                                              |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                    | 7.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.3                                                                                 |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 10                                                                                 |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 990                                                                                 | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1354                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 117                                                                               | 0                                                                                 | 0                                                                                 | 80                                                                                | 103                                                                               | 26                                                                                 | 1066                                                                                | 0                                                                                   | 0                                                                                   | 117                                                                                 | 1436                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |



|                            |      |    |
|----------------------------|------|----|
| Lane Group                 | SBR  | Ø9 |
| Lane Configurations        |      |    |
| Traffic Volume (vph)       | 82   |    |
| Future Volume (vph)        | 82   |    |
| Ideal Flow (vphpl)         | 1800 |    |
| Storage Length (m)         | 0.0  |    |
| Storage Lanes              | 0    |    |
| Taper Length (m)           |      |    |
| Lane Util. Factor          | 0.95 |    |
| Ped Bike Factor            |      |    |
| Frt                        |      |    |
| Flt Protected              |      |    |
| Satd. Flow (prot)          | 0    |    |
| Flt Permitted              |      |    |
| Satd. Flow (perm)          | 0    |    |
| Right Turn on Red          | Yes  |    |
| Satd. Flow (RTOR)          |      |    |
| Link Speed (k/h)           |      |    |
| Link Distance (m)          |      |    |
| Travel Time (s)            |      |    |
| Confl. Peds. (#/hr)        | 10   |    |
| Confl. Bikes (#/hr)        | 1    |    |
| Peak Hour Factor           | 1.00 |    |
| Heavy Vehicles (%)         | 1%   |    |
| Adj. Flow (vph)            | 82   |    |
| Shared Lane Traffic (%)    |      |    |
| Lane Group Flow (vph)      | 0    |    |
| Enter Blocked Intersection | No   |    |
| Lane Alignment             | R NA |    |
| Median Width(m)            |      |    |
| Link Offset(m)             |      |    |
| Crosswalk Width(m)         |      |    |
| Two way Left Turn Lane     |      |    |
| Headway Factor             | 1.01 |    |
| Turning Speed (k/h)        | 14   |    |
| Number of Detectors        |      |    |
| Detector Template          |      |    |
| Leading Detector (m)       |      |    |
| Trailing Detector (m)      |      |    |
| Detector 1 Position(m)     |      |    |
| Detector 1 Size(m)         |      |    |
| Detector 1 Type            |      |    |
| Detector 1 Channel         |      |    |
| Detector 1 Extend (s)      |      |    |
| Detector 1 Queue (s)       |      |    |
| Detector 1 Delay (s)       |      |    |
| Detector 2 Position(m)     |      |    |
| Detector 2 Size(m)         |      |    |
| Detector 2 Type            |      |    |
| Detector 2 Channel         |      |    |
| Detector 2 Extend (s)      |      |    |
| Turn Type                  |      |    |
| Protected Phases           | 9    |    |
| Permitted Phases           |      |    |
| Detector Phase             |      |    |

8: Terry Fox & Sobey's  
PM Peak Hour

560 Hazeldean Road  
2029 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 26.0                                                                               | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                | 26.0                                                                                |
| Total Split (s)         | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 84.0                                                                               | 84.0                                                                                |                                                                                     | 84.0                                                                                | 84.0                                                                                | 84.0                                                                                |
| Total Split (%)         | 25.8%                                                                             | 25.8%                                                                             |                                                                                   | 25.8%                                                                             | 25.8%                                                                             | 25.8%                                                                             | 70.0%                                                                              | 70.0%                                                                               |                                                                                     | 70.0%                                                                               | 70.0%                                                                               | 70.0%                                                                               |
| Maximum Green (s)       | 24.0                                                                              | 24.0                                                                              |                                                                                   | 24.0                                                                              | 24.0                                                                              | 24.0                                                                              | 78.0                                                                               | 78.0                                                                                |                                                                                     | 78.0                                                                                | 78.0                                                                                | 78.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 1.8                                                                                | 1.8                                                                                 |                                                                                     | 1.8                                                                                 | 1.8                                                                                 | 1.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               | 6.0                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 6.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 17.0                                                                              | 17.0                                                                              |                                                                                   | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              | 13.0                                                                               | 13.0                                                                                |                                                                                     | 13.0                                                                                | 13.0                                                                                | 13.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  | 10                                                                                  |
| Act Effct Green (s)     |                                                                                   | 14.8                                                                              |                                                                                   |                                                                                   | 14.8                                                                              | 14.8                                                                              | 87.2                                                                               | 87.2                                                                                |                                                                                     |                                                                                     | 87.2                                                                                | 87.2                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.12                                                                              | 0.12                                                                              | 0.73                                                                               | 0.73                                                                                |                                                                                     |                                                                                     | 0.73                                                                                | 0.73                                                                                |
| v/c Ratio               |                                                                                   | 0.50                                                                              |                                                                                   |                                                                                   | 0.58                                                                              | 0.37                                                                              | 0.13                                                                               | 0.29                                                                                |                                                                                     |                                                                                     | 0.35                                                                                | 0.57                                                                                |
| Control Delay           |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 65.2                                                                              | 11.8                                                                              | 6.5                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 3.8                                                                                 | 3.2                                                                                 |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.3                                                                                 |
| Total Delay             |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 65.2                                                                              | 11.8                                                                              | 6.5                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 3.8                                                                                 | 3.4                                                                                 |
| LOS                     |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 | B                                                                                 | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 35.1                                                                              |                                                                                   |                                                                                    | 6.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 3.5                                                                                 |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   | 16.9                                                                              | 0.0                                                                               | 2.0                                                                                | 32.9                                                                                |                                                                                     |                                                                                     | 1.5                                                                                 | 9.6                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 26.0                                                                              |                                                                                   |                                                                                   | 29.2                                                                              | 13.2                                                                              | 5.6                                                                                | 39.2                                                                                |                                                                                     |                                                                                     | m3.7                                                                                | m20.2                                                                               |
| Internal Link Dist (m)  |                                                                                   | 108.0                                                                             |                                                                                   |                                                                                   | 128.6                                                                             |                                                                                   |                                                                                    | 116.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 118.7                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 338                                                                               |                                                                                   |                                                                                   | 222                                                                               | 392                                                                               | 199                                                                                | 3646                                                                                |                                                                                     |                                                                                     | 332                                                                                 | 2541                                                                                |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 427                                                                                 |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.35                                                                              |                                                                                   |                                                                                   | 0.36                                                                              | 0.26                                                                              | 0.13                                                                               | 0.29                                                                                |                                                                                     |                                                                                     | 0.35                                                                                | 0.68                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 22 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 7.5

Intersection LOS: A

Intersection Capacity Utilization 81.6%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Terry Fox & Sobey's



|                         |     |     |
|-------------------------|-----|-----|
| Lane Group              | SBR | Ø9  |
| Switch Phase            |     |     |
| Minimum Initial (s)     |     | 3.0 |
| Minimum Split (s)       |     | 5.0 |
| Total Split (s)         |     | 5.0 |
| Total Split (%)         |     | 4%  |
| Maximum Green (s)       |     | 3.0 |
| Yellow Time (s)         |     | 2.0 |
| All-Red Time (s)        |     | 0.0 |
| Lost Time Adjust (s)    |     |     |
| Total Lost Time (s)     |     |     |
| Lead/Lag                |     |     |
| Lead-Lag Optimize?      |     |     |
| Vehicle Extension (s)   |     | 3.0 |
| Recall Mode             |     | Max |
| Walk Time (s)           |     |     |
| Flash Dont Walk (s)     |     |     |
| Pedestrian Calls (#/hr) |     |     |
| Act Effct Green (s)     |     |     |
| Actuated g/C Ratio      |     |     |
| v/c Ratio               |     |     |
| Control Delay           |     |     |
| Queue Delay             |     |     |
| Total Delay             |     |     |
| LOS                     |     |     |
| Approach Delay          |     |     |
| Approach LOS            |     |     |
| Queue Length 50th (m)   |     |     |
| Queue Length 95th (m)   |     |     |
| Internal Link Dist (m)  |     |     |
| Turn Bay Length (m)     |     |     |
| Base Capacity (vph)     |     |     |
| Starvation Cap Reductn  |     |     |
| Spillback Cap Reductn   |     |     |
| Storage Cap Reductn     |     |     |
| Reduced v/c Ratio       |     |     |
| Intersection Summary    |     |     |

|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                  | 983                                                                                 | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1317                                                                                |
| Future Volume (vph)        | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                  | 983                                                                                 | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1317                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 15.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 65.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 120.0                                                                               |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 20.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 0.99                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                                | 1.00                                                                                |                                                                                     |                                                                                     | 0.99                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.925                                                                             |                                                                                   |                                                                                   | 0.872                                                                             |                                                                                   |                                                                                     | 0.995                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1701                                                                              | 1701                                                                              | 0                                                                                 | 1768                                                                              | 1598                                                                              | 0                                                                                 | 1768                                                                                | 3512                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3537                                                                                |
| Flt Permitted              | 0.629                                                                             |                                                                                   |                                                                                   | 0.748                                                                             |                                                                                   |                                                                                   | 0.186                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.267                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1120                                                                              | 1701                                                                              | 0                                                                                 | 1376                                                                              | 1598                                                                              | 0                                                                                 | 345                                                                                 | 3512                                                                                | 0                                                                                   | 0                                                                                   | 494                                                                                 | 3537                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 7                                                                                 |                                                                                   |                                                                                   | 97                                                                                |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 40                                                                                |                                                                                   |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 65.4                                                                              |                                                                                   |                                                                                   | 381.2                                                                             |                                                                                   |                                                                                     | 479.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 200.7                                                                               |
| Travel Time (s)            |                                                                                   | 4.7                                                                               |                                                                                   |                                                                                   | 34.3                                                                              |                                                                                   |                                                                                     | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     | 10.3                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                 | 10                                                                                  |                                                                                     | 14                                                                                  |                                                                                     | 14                                                                                  |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 5%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                  | 983                                                                                 | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1317                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 23                                                                                | 14                                                                                | 0                                                                                 | 48                                                                                | 114                                                                               | 0                                                                                 | 12                                                                                  | 1017                                                                                | 0                                                                                   | 0                                                                                   | 141                                                                                 | 1317                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                                | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 44    |
| Future Volume (vph)        | 44    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 55.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.95  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1508  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 44    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 10    |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 44    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 44    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 28.3                                                                               | 28.3                                                                                |                                                                                     | 28.3                                                                                | 28.3                                                                                | 28.3                                                                                |
| Total Split (s)         | 38.0                                                                              | 38.0                                                                              |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 82.0                                                                               | 82.0                                                                                |                                                                                     | 82.0                                                                                | 82.0                                                                                | 82.0                                                                                |
| Total Split (%)         | 31.7%                                                                             | 31.7%                                                                             |                                                                                   | 31.7%                                                                             | 31.7%                                                                             |                                                                                   | 68.3%                                                                              | 68.3%                                                                               |                                                                                     | 68.3%                                                                               | 68.3%                                                                               | 68.3%                                                                               |
| Maximum Green (s)       | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 75.7                                                                               | 75.7                                                                                |                                                                                     | 75.7                                                                                | 75.7                                                                                | 75.7                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.1                                                                                | 2.1                                                                                 |                                                                                     | 2.1                                                                                 | 2.1                                                                                 | 2.1                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.3                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 15.0                                                                                |
| Pedestrian Calls (#/hr) | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 14                                                                                 | 14                                                                                  |                                                                                     | 10                                                                                  | 10                                                                                  | 10                                                                                  |
| Act Effct Green (s)     | 14.3                                                                              | 14.3                                                                              |                                                                                   | 14.3                                                                              | 14.3                                                                              |                                                                                   | 93.4                                                                               | 93.4                                                                                |                                                                                     |                                                                                     | 93.4                                                                                | 93.4                                                                                |
| Actuated g/C Ratio      | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.78                                                                               | 0.78                                                                                |                                                                                     |                                                                                     | 0.78                                                                                | 0.78                                                                                |
| v/c Ratio               | 0.17                                                                              | 0.07                                                                              |                                                                                   | 0.29                                                                              | 0.41                                                                              |                                                                                   | 0.04                                                                               | 0.37                                                                                |                                                                                     |                                                                                     | 0.37                                                                                | 0.48                                                                                |
| Control Delay           | 46.9                                                                              | 29.7                                                                              |                                                                                   | 50.1                                                                              | 16.1                                                                              |                                                                                   | 5.7                                                                                | 5.4                                                                                 |                                                                                     |                                                                                     | 15.2                                                                                | 13.0                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 46.9                                                                              | 29.7                                                                              |                                                                                   | 50.1                                                                              | 16.1                                                                              |                                                                                   | 5.7                                                                                | 5.4                                                                                 |                                                                                     |                                                                                     | 15.2                                                                                | 13.0                                                                                |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | B                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 40.4                                                                              |                                                                                   |                                                                                   | 26.2                                                                              |                                                                                   |                                                                                    | 5.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 13.0                                                                                |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 4.8                                                                               | 1.4                                                                               |                                                                                   | 10.1                                                                              | 3.5                                                                               |                                                                                   | 0.4                                                                                | 23.7                                                                                |                                                                                     |                                                                                     | 17.2                                                                                | 87.8                                                                                |
| Queue Length 95th (m)   | 10.2                                                                              | 6.0                                                                               |                                                                                   | 17.4                                                                              | 16.0                                                                              |                                                                                   | 3.1                                                                                | 65.1                                                                                |                                                                                     |                                                                                     | 34.0                                                                                | 116.3                                                                               |
| Internal Link Dist (m)  |                                                                                   | 41.4                                                                              |                                                                                   |                                                                                   | 357.2                                                                             |                                                                                   |                                                                                    | 455.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 176.7                                                                               |
| Turn Bay Length (m)     | 15.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 120.0                                                                               |                                                                                     |
| Base Capacity (vph)     | 298                                                                               | 458                                                                               |                                                                                   | 366                                                                               | 497                                                                               |                                                                                   | 268                                                                                | 2736                                                                                |                                                                                     |                                                                                     | 384                                                                                 | 2754                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.08                                                                              | 0.03                                                                              |                                                                                   | 0.13                                                                              | 0.23                                                                              |                                                                                   | 0.04                                                                               | 0.37                                                                                |                                                                                     |                                                                                     | 0.37                                                                                | 0.48                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 115 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 11.3

Intersection LOS: B

Intersection Capacity Utilization 75.3%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Terry Fox & Halkirk/Winchester



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 28.3  |
| Total Split (s)         | 82.0  |
| Total Split (%)         | 68.3% |
| Maximum Green (s)       | 75.7  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.1   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.3   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 15.0  |
| Pedestrian Calls (#/hr) | 10    |
| Act Effct Green (s)     | 93.4  |
| Actuated g/C Ratio      | 0.78  |
| v/c Ratio               | 0.04  |
| Control Delay           | 5.8   |
| Queue Delay             | 0.0   |
| Total Delay             | 5.8   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 1.3   |
| Queue Length 95th (m)   | m6.5  |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 55.0  |
| Base Capacity (vph)     | 1183  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.04  |
| Intersection Summary    |       |

|                                         |  |  |  |  |  |  |
|-----------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                              | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | NBL                                                                               | NBR                                                                               |
| Lane Configurations                     |  |                                                                                   |  |  |  |                                                                                   |
| Traffic Volume (vph)                    | 1312                                                                              | 0                                                                                 | 0                                                                                 | 1683                                                                              | 0                                                                                 | 0                                                                                 |
| Future Volume (vph)                     | 1312                                                                              | 0                                                                                 | 0                                                                                 | 1683                                                                              | 0                                                                                 | 0                                                                                 |
| Ideal Flow (vphpl)                      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)                      |                                                                                   | 0.0                                                                               | 85.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                               |
| Storage Lanes                           |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |
| Taper Length (m)                        |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   | 10.0                                                                              |                                                                                   |
| Lane Util. Factor                       | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              |
| Ped Bike Factor                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Frt                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Flt Protected                           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Satd. Flow (prot)                       | 3502                                                                              | 0                                                                                 | 1843                                                                              | 3502                                                                              | 1843                                                                              | 0                                                                                 |
| Flt Permitted                           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Satd. Flow (perm)                       | 3502                                                                              | 0                                                                                 | 1843                                                                              | 3502                                                                              | 1843                                                                              | 0                                                                                 |
| Link Speed (k/h)                        | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                | 50                                                                                |                                                                                   |
| Link Distance (m)                       | 150.7                                                                             |                                                                                   |                                                                                   | 644.5                                                                             | 279.6                                                                             |                                                                                   |
| Travel Time (s)                         | 9.0                                                                               |                                                                                   |                                                                                   | 38.7                                                                              | 20.1                                                                              |                                                                                   |
| Confl. Peds. (#/hr)                     |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Peak Hour Factor                        | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Adj. Flow (vph)                         | 1312                                                                              | 0                                                                                 | 0                                                                                 | 1683                                                                              | 0                                                                                 | 0                                                                                 |
| Shared Lane Traffic (%)                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)                   | 1312                                                                              | 0                                                                                 | 0                                                                                 | 1683                                                                              | 0                                                                                 | 0                                                                                 |
| Enter Blocked Intersection              | No                                                                                | No                                                                                | Yes                                                                               | Yes                                                                               | No                                                                                | No                                                                                |
| Lane Alignment                          | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)                         | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               | 4.0                                                                               |                                                                                   |
| Link Offset(m)                          | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)                      | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor                          | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)                     |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 24                                                                                | 14                                                                                |
| Sign Control                            | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              | Stop                                                                              |                                                                                   |
| Intersection Summary                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Area Type:                              | Other                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Control Type:                           | Unsignalized                                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization 52.4% | ICU Level of Service A                                                            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Analysis Period (min) 15                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |



4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2029 Background Traffic (demand rationalized)

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 411                                                                               | 761                                                                               | 262                                                                               | 14                                                                                | 301                                                                               | 916                                                                                | 308                                                                                 | 299                                                                                 | 794                                                                                 | 208                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 2                                                                                 | 411                                                                               | 761                                                                               | 262                                                                               | 14                                                                                | 301                                                                               | 916                                                                                | 308                                                                                 | 299                                                                                 | 794                                                                                 | 208                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.95                                                                              |                                                                                   | 0.99                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 3364                                                                              | 3537                                                                              | 1551                                                                              | 0                                                                                 | 3398                                                                              | 3537                                                                               | 1551                                                                                | 3397                                                                                | 3468                                                                                | 1567                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 3358                                                                              | 3537                                                                              | 1481                                                                              | 0                                                                                 | 3363                                                                              | 3537                                                                               | 1521                                                                                | 3386                                                                                | 3468                                                                                | 1527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 237                                                                               |                                                                                   |                                                                                   |                                                                                    | 175                                                                                 |                                                                                     |                                                                                     | 150                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 644.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 38.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 24                                                                                |                                                                                   | 24                                                                                |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 3%                                                                                  | 2%                                                                                  | 3%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 411                                                                               | 761                                                                               | 262                                                                               | 14                                                                                | 301                                                                               | 916                                                                                | 308                                                                                 | 299                                                                                 | 794                                                                                 | 208                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 413                                                                               | 761                                                                               | 262                                                                               | 0                                                                                 | 315                                                                               | 916                                                                                | 308                                                                                 | 299                                                                                 | 794                                                                                 | 208                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2029 Background Traffic (demand rationalized)

|                            |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                 | SBL                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations        |  |  |  |
| Traffic Volume (vph)       | 305                                                                               | 816                                                                               | 425                                                                               |
| Future Volume (vph)        | 305                                                                               | 816                                                                               | 425                                                                               |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)         | 155.0                                                                             |                                                                                   | 200.0                                                                             |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              |
| Ped Bike Factor            | 0.99                                                                              |                                                                                   | 0.98                                                                              |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)          | 3431                                                                              | 3502                                                                              | 1567                                                                              |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)          | 3407                                                                              | 3502                                                                              | 1537                                                                              |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 265                                                                               |
| Link Speed (k/h)           |                                                                                   | 70                                                                                |                                                                                   |
| Link Distance (m)          |                                                                                   | 316.2                                                                             |                                                                                   |
| Travel Time (s)            |                                                                                   | 16.3                                                                              |                                                                                   |
| Confl. Peds. (#/hr)        | 10                                                                                |                                                                                   | 5                                                                                 |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 2%                                                                                |
| Adj. Flow (vph)            | 305                                                                               | 816                                                                               | 425                                                                               |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)      | 306                                                                               | 816                                                                               | 425                                                                               |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)            |                                                                                   | 10.0                                                                              |                                                                                   |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 | 1                                                                                 |
| Detector Template          | Left                                                                              | Thru                                                                              | Right                                                                             |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              |
| Protected Phases           | 1                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   | 6                                                                                 |
| Detector Phase             | 1                                                                                 | 6                                                                                 | 6                                                                                 |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2029 Background Traffic (demand rationalized)

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                               | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                               | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 23.0                                                                              | 23.0                                                                              | 42.0                                                                              | 42.0                                                                              | 23.0                                                                              | 23.0                                                                              | 42.0                                                                               | 42.0                                                                                | 18.0                                                                                | 37.0                                                                                | 37.0                                                                                | 18.0                                                                                |
| Total Split (%)         | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                             | 35.0%                                                                             | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                              | 35.0%                                                                               | 15.0%                                                                               | 30.8%                                                                               | 30.8%                                                                               | 15.0%                                                                               |
| Maximum Green (s)       | 16.5                                                                              | 16.5                                                                              | 35.5                                                                              | 35.5                                                                              | 16.5                                                                              | 16.5                                                                              | 35.5                                                                               | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                | 11.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 24                                                                                | 24                                                                                |                                                                                   |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 16.4                                                                              | 35.7                                                                              | 35.7                                                                              |                                                                                   | 15.2                                                                              | 34.4                                                                               | 34.4                                                                                | 11.9                                                                                | 31.2                                                                                | 31.2                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.30                                                                              | 0.30                                                                              |                                                                                   | 0.13                                                                              | 0.29                                                                               | 0.29                                                                                | 0.10                                                                                | 0.26                                                                                | 0.26                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.90                                                                              | 0.72                                                                              | 0.43                                                                              |                                                                                   | 0.73                                                                              | 0.90                                                                               | 0.55                                                                                | 0.89                                                                                | 0.88                                                                                | 0.41                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 74.3                                                                              | 42.5                                                                              | 8.1                                                                               |                                                                                   | 51.1                                                                              | 63.7                                                                               | 30.9                                                                                | 87.9                                                                                | 48.2                                                                                | 8.6                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 74.3                                                                              | 42.5                                                                              | 8.1                                                                               |                                                                                   | 51.1                                                                              | 63.7                                                                               | 30.9                                                                                | 87.9                                                                                | 48.2                                                                                | 8.7                                                                                 |                                                                                     |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | E                                                                                  | C                                                                                   | F                                                                                   | D                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 45.3                                                                              |                                                                                   |                                                                                   |                                                                                   | 54.6                                                                               |                                                                                     |                                                                                     | 51.0                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 46.0                                                                              | 77.7                                                                              | 3.9                                                                               |                                                                                   | 34.2                                                                              | 105.3                                                                              | 34.9                                                                                | 27.9                                                                                | 88.4                                                                                | 13.5                                                                                |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | #70.8                                                                             | 98.3                                                                              | 22.8                                                                              |                                                                                   | 48.0                                                                              | #133.7                                                                             | 69.9                                                                                | #59.2                                                                               | #120.3                                                                              | 7.1                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 620.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                              |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 462                                                                               | 1057                                                                              | 609                                                                               |                                                                                   | 467                                                                               | 1046                                                                               | 573                                                                                 | 336                                                                                 | 900                                                                                 | 507                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 35                                                                                  |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.89                                                                              | 0.72                                                                              | 0.43                                                                              |                                                                                   | 0.67                                                                              | 0.88                                                                               | 0.54                                                                                | 0.89                                                                                | 0.88                                                                                | 0.44                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 52.5

Intersection LOS: D

Intersection Capacity Utilization 98.1%

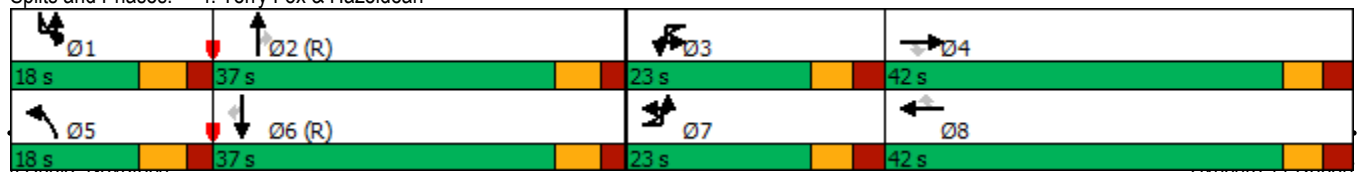
ICU Level of Service F

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean





| Lane Group              | SBL   | SBT    | SBR   |
|-------------------------|-------|--------|-------|
| Switch Phase            |       |        |       |
| Minimum Initial (s)     | 5.0   | 10.0   | 10.0  |
| Minimum Split (s)       | 11.5  | 35.5   | 35.5  |
| Total Split (s)         | 18.0  | 37.0   | 37.0  |
| Total Split (%)         | 15.0% | 30.8%  | 30.8% |
| Maximum Green (s)       | 11.5  | 30.5   | 30.5  |
| Yellow Time (s)         | 4.2   | 4.2    | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3    | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0    | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5    | 6.5   |
| Lead/Lag                | Lead  | Lag    | Lag   |
| Lead-Lag Optimize?      |       |        |       |
| Vehicle Extension (s)   | 3.0   | 3.0    | 3.0   |
| Recall Mode             | None  | C-Max  | C-Max |
| Walk Time (s)           |       | 7.0    | 7.0   |
| Flash Dont Walk (s)     |       | 22.0   | 22.0  |
| Pedestrian Calls (#/hr) |       | 10     | 10    |
| Act Effct Green (s)     | 12.0  | 31.2   | 31.2  |
| Actuated g/C Ratio      | 0.10  | 0.26   | 0.26  |
| v/c Ratio               | 0.89  | 0.89   | 0.71  |
| Control Delay           | 85.3  | 55.8   | 24.6  |
| Queue Delay             | 25.7  | 0.0    | 0.0   |
| Total Delay             | 111.0 | 55.8   | 24.6  |
| LOS                     | F     | E      | C     |
| Approach Delay          |       | 58.2   |       |
| Approach LOS            |       | E      |       |
| Queue Length 50th (m)   | 36.7  | 64.2   | 18.5  |
| Queue Length 95th (m)   | #61.0 | #119.8 | 79.3  |
| Internal Link Dist (m)  |       | 292.2  |       |
| Turn Bay Length (m)     | 155.0 |        | 200.0 |
| Base Capacity (vph)     | 342   | 912    | 596   |
| Starvation Cap Reductn  | 0     | 0      | 0     |
| Spillback Cap Reductn   | 45    | 0      | 0     |
| Storage Cap Reductn     | 0     | 0      | 0     |
| Reduced v/c Ratio       | 1.03  | 0.89   | 0.71  |
| Intersection Summary    |       |        |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 3                                                                                 | 332                                                                               | 1066                                                                              | 13                                                                                | 1                                                                                 | 85                                                                                | 690                                                                                | 65                                                                                  | 24                                                                                  | 504                                                                                 | 194                                                                                 | 27                                                                                  |
| Future Volume (vph)        | 3                                                                                 | 332                                                                               | 1066                                                                              | 13                                                                                | 1                                                                                 | 85                                                                                | 690                                                                                | 65                                                                                  | 24                                                                                  | 504                                                                                 | 194                                                                                 | 27                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                    | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                    |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3396                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3370                                                                               | 1551                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3420                                                                              | 3396                                                                              | 0                                                                                 | 0                                                                                 | 3391                                                                              | 3370                                                                               | 1525                                                                                | 1745                                                                                | 3502                                                                                | 1540                                                                                | 3417                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 145                                                                                 |                                                                                     |                                                                                     | 178                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                              |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                               |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 5%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 6%                                                                                 | 3%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 332                                                                               | 1066                                                                              | 13                                                                                | 1                                                                                 | 85                                                                                | 690                                                                                | 65                                                                                  | 24                                                                                  | 504                                                                                 | 194                                                                                 | 27                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 335                                                                               | 1079                                                                              | 0                                                                                 | 0                                                                                 | 86                                                                                | 690                                                                                | 65                                                                                  | 24                                                                                  | 504                                                                                 | 194                                                                                 | 27                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                  |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                  | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 250   | 134   |
| Future Volume (vph)        | 250   | 134   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 60.0  |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3502  | 1582  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3502  | 1556  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 145   |
| Link Speed (k/h)           | 50    |       |
| Link Distance (m)          | 251.2 |       |
| Travel Time (s)            | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 2%    | 1%    |
| Adj. Flow (vph)            | 250   | 134   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 250   | 134   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | R NA  |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 4     |       |
| Permitted Phases           |       | 4     |
| Detector Phase             | 4     | 4     |
| Switch Phase               |       |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 49.0                                                                              |                                                                                   | 12.0                                                                              | 12.0                                                                              | 45.0                                                                                | 45.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 13.9%                                                                             | 13.9%                                                                             | 42.6%                                                                             |                                                                                   | 10.4%                                                                             | 10.4%                                                                             | 39.1%                                                                               | 39.1%                                                                               | 10.4%                                                                               | 36.5%                                                                               | 36.5%                                                                               | 10.4%                                                                               |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 42.9                                                                              |                                                                                   | 5.9                                                                               | 5.9                                                                               | 38.9                                                                                | 38.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                 | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                               | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                                | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 18.2                                                                              | 60.5                                                                              |                                                                                   |                                                                                   | 7.6                                                                               | 47.5                                                                                | 47.5                                                                                |                                                                                     | 5.8                                                                                 | 23.9                                                                                | 5.8                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.16                                                                              | 0.53                                                                              |                                                                                   |                                                                                   | 0.07                                                                              | 0.41                                                                                | 0.41                                                                                |                                                                                     | 0.05                                                                                | 0.21                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.62                                                                              | 0.60                                                                              |                                                                                   |                                                                                   | 0.39                                                                              | 0.50                                                                                | 0.09                                                                                |                                                                                     | 0.27                                                                                | 0.69                                                                                | 0.16                                                                                |
| Control Delay           |                                                                                   | 51.7                                                                              | 24.4                                                                              |                                                                                   |                                                                                   | 80.8                                                                              | 11.6                                                                                | 0.9                                                                                 |                                                                                     | 60.6                                                                                | 46.8                                                                                | 54.4                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 51.7                                                                              | 24.4                                                                              |                                                                                   |                                                                                   | 80.8                                                                              | 11.6                                                                                | 0.9                                                                                 |                                                                                     | 60.6                                                                                | 46.8                                                                                | 54.4                                                                                |
| LOS                     |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   |                                                                                   | F                                                                                 | B                                                                                   | A                                                                                   |                                                                                     | E                                                                                   | D                                                                                   | D                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 30.9                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.8                                                                                |                                                                                     |                                                                                     | 37.1                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   | B                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 33.4                                                                              | 89.5                                                                              |                                                                                   |                                                                                   | 9.9                                                                               | 63.2                                                                                | 1.2                                                                                 |                                                                                     | 4.9                                                                                 | 51.8                                                                                | 2.7                                                                                 |
| Queue Length 95th (m)   |                                                                                   | #65.0                                                                             | 132.5                                                                             |                                                                                   |                                                                                   | 17.6                                                                              | 9.3                                                                                 | 0.0                                                                                 |                                                                                     | 12.9                                                                                | 59.3                                                                                | 17.4                                                                                |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                               |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               |                                                                                     | 100.0                                                                               |                                                                                     | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 542                                                                               | 1787                                                                              |                                                                                   |                                                                                   | 223                                                                               | 1390                                                                                | 714                                                                                 |                                                                                     | 89                                                                                  | 1093                                                                                | 603                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.62                                                                              | 0.60                                                                              |                                                                                   |                                                                                   | 0.39                                                                              | 0.50                                                                                | 0.09                                                                                |                                                                                     | 0.27                                                                                | 0.46                                                                                | 0.15                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 19 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 28.8

Intersection LOS: C

Intersection Capacity Utilization 76.8%

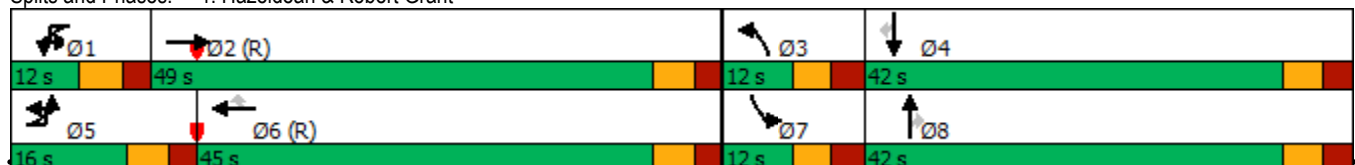
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Hazeldean & Robert Grant



|                         | ↓     | ↙     |
|-------------------------|-------|-------|
| Lane Group              | SBT   | SBR   |
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 41.1  | 41.1  |
| Total Split (s)         | 42.0  | 42.0  |
| Total Split (%)         | 36.5% | 36.5% |
| Maximum Green (s)       | 35.9  | 35.9  |
| Yellow Time (s)         | 3.3   | 3.3   |
| All-Red Time (s)        | 2.8   | 2.8   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.1   | 6.1   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 28.0  | 28.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 23.9  | 23.9  |
| Actuated g/C Ratio      | 0.21  | 0.21  |
| v/c Ratio               | 0.34  | 0.31  |
| Control Delay           | 39.0  | 6.2   |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 39.0  | 6.2   |
| LOS                     | D     | A     |
| Approach Delay          | 29.3  |       |
| Approach LOS            | C     |       |
| Queue Length 50th (m)   | 23.7  | 0.0   |
| Queue Length 95th (m)   | 30.0  | 10.9  |
| Internal Link Dist (m)  | 227.2 |       |
| Turn Bay Length (m)     |       | 60.0  |
| Base Capacity (vph)     | 1093  | 585   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.23  | 0.23  |
| Intersection Summary    |       |       |



|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 1                                                                                 | 107                                                                               | 1026                                                                              | 52                                                                                | 21                                                                                | 823                                                                               | 47                                                                                  | 37                                                                                  | 0                                                                                   | 32                                                                                  | 28                                                                                  | 0                                                                                   |
| Future Volume (vph)        | 1                                                                                 | 107                                                                               | 1026                                                                              | 52                                                                                | 21                                                                                | 823                                                                               | 47                                                                                  | 37                                                                                  | 0                                                                                   | 32                                                                                  | 28                                                                                  | 0                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 75.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 180.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 75.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   | 0.97                                                                                | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                               |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1768                                                                              | 3409                                                                              | 0                                                                                 | 1751                                                                              | 3402                                                                              | 1567                                                                                | 1751                                                                                | 1537                                                                                | 0                                                                                   | 1768                                                                                | 1843                                                                                |
| Flt Permitted              |                                                                                   | 0.295                                                                             |                                                                                   |                                                                                   | 0.265                                                                             |                                                                                   |                                                                                     | 0.757                                                                               |                                                                                     |                                                                                     | 0.736                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 548                                                                               | 3409                                                                              | 0                                                                                 | 487                                                                               | 3402                                                                              | 1518                                                                                | 1386                                                                                | 1537                                                                                | 0                                                                                   | 1361                                                                                | 1843                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 9                                                                                 |                                                                                   |                                                                                   |                                                                                   | 89                                                                                  |                                                                                     | 137                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |
| Link Distance (m)          |                                                                                   |                                                                                   | 297.5                                                                             |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                     |                                                                                     | 259.5                                                                               |                                                                                     |                                                                                     | 237.4                                                                               |
| Travel Time (s)            |                                                                                   |                                                                                   | 17.9                                                                              |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                     |                                                                                     | 18.7                                                                                |                                                                                     |                                                                                     | 17.1                                                                                |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 4%                                                                                | 2%                                                                                | 2%                                                                                | 5%                                                                                | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  | 2%                                                                                  |
| Adj. Flow (vph)            | 1                                                                                 | 107                                                                               | 1026                                                                              | 52                                                                                | 21                                                                                | 823                                                                               | 47                                                                                  | 37                                                                                  | 0                                                                                   | 32                                                                                  | 28                                                                                  | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 108                                                                               | 1078                                                                              | 0                                                                                 | 21                                                                                | 823                                                                               | 47                                                                                  | 37                                                                                  | 32                                                                                  | 0                                                                                   | 28                                                                                  | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                     |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                               | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | pm+pt                                                                             | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                                | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                |                                                                                     |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |
| Permitted Phases           | 2                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                   | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 | 6                                                                                   | 8                                                                                   | 8                                                                                   |                                                                                     | 4                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | 7     |
| Traffic Volume (vph)       | 17    |
| Future Volume (vph)        | 17    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 40.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.98  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1552  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 284   |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 17    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 17    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | Cl+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 4     |
| Detector Phase             | 4     |
| Switch Phase               |       |

2: Hazeldean & Roger Griffiths  
AM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 11.2                                                                              | 11.2                                                                              | 31.3                                                                              |                                                                                   | 31.3                                                                              | 31.3                                                                              | 31.3                                                                               | 31.2                                                                                | 31.2                                                                                |                                                                                     | 31.2                                                                                | 31.2                                                                                |
| Total Split (s)         | 20.0                                                                              | 20.0                                                                              | 82.0                                                                              |                                                                                   | 62.0                                                                              | 62.0                                                                              | 62.0                                                                               | 33.0                                                                                | 33.0                                                                                |                                                                                     | 33.0                                                                                | 33.0                                                                                |
| Total Split (%)         | 17.4%                                                                             | 17.4%                                                                             | 71.3%                                                                             |                                                                                   | 53.9%                                                                             | 53.9%                                                                             | 53.9%                                                                              | 28.7%                                                                               | 28.7%                                                                               |                                                                                     | 28.7%                                                                               | 28.7%                                                                               |
| Maximum Green (s)       | 13.8                                                                              | 13.8                                                                              | 75.7                                                                              |                                                                                   | 55.7                                                                              | 55.7                                                                              | 55.7                                                                               | 26.8                                                                                | 26.8                                                                                |                                                                                     | 26.8                                                                                | 26.8                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.3                                                                                 | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.5                                                                               | 2.5                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                               | 2.6                                                                               | 2.6                                                                                | 2.9                                                                                 | 2.9                                                                                 |                                                                                     | 2.9                                                                                 | 2.9                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.2                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               | 6.3                                                                                | 6.2                                                                                 | 6.2                                                                                 |                                                                                     | 6.2                                                                                 | 6.2                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               | Lag                                                                               | Lag                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | C-Max                                                                             | C-Max                                                                             | C-Max                                                                              | None                                                                                | None                                                                                |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   | 18.0                                                                              | 18.0                                                                              | 18.0                                                                               | 18.0                                                                                | 18.0                                                                                |                                                                                     | 18.0                                                                                | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 92.8                                                                              | 94.0                                                                              |                                                                                   | 79.3                                                                              | 79.3                                                                              | 79.3                                                                               | 13.0                                                                                | 13.0                                                                                |                                                                                     | 13.0                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.81                                                                              | 0.82                                                                              |                                                                                   | 0.69                                                                              | 0.69                                                                              | 0.69                                                                               | 0.11                                                                                | 0.11                                                                                |                                                                                     | 0.11                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.21                                                                              | 0.39                                                                              |                                                                                   | 0.06                                                                              | 0.35                                                                              | 0.04                                                                               | 0.24                                                                                | 0.11                                                                                |                                                                                     | 0.18                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 4.5                                                                               | 3.8                                                                               |                                                                                   | 6.3                                                                               | 9.8                                                                               | 2.1                                                                                | 47.9                                                                                | 0.8                                                                                 |                                                                                     | 46.4                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 4.5                                                                               | 3.8                                                                               |                                                                                   | 6.3                                                                               | 9.8                                                                               | 2.1                                                                                | 47.9                                                                                | 0.8                                                                                 |                                                                                     | 46.4                                                                                |                                                                                     |
| LOS                     |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   | A                                                                                 | A                                                                                 | A                                                                                  | D                                                                                   | A                                                                                   |                                                                                     | D                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 3.9                                                                               |                                                                                   |                                                                                   | 9.3                                                                               |                                                                                    |                                                                                     | 26.0                                                                                |                                                                                     |                                                                                     | 28.9                                                                                |
| Approach LOS            |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                    |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 2.8                                                                               | 14.9                                                                              |                                                                                   | 1.9                                                                               | 58.2                                                                              | 1.6                                                                                | 7.3                                                                                 | 0.0                                                                                 |                                                                                     | 5.5                                                                                 |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | m11.3                                                                             | 43.5                                                                              |                                                                                   | m5.5                                                                              | 101.0                                                                             | 3.9                                                                                | 14.6                                                                                | 0.0                                                                                 |                                                                                     | 11.9                                                                                |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 273.5                                                                             |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                    |                                                                                     | 235.5                                                                               |                                                                                     |                                                                                     | 213.4                                                                               |
| Turn Bay Length (m)     |                                                                                   | 75.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 180.0                                                                              |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 588                                                                               | 2788                                                                              |                                                                                   | 335                                                                               | 2346                                                                              | 1074                                                                               | 322                                                                                 | 463                                                                                 |                                                                                     | 317                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.18                                                                              | 0.39                                                                              |                                                                                   | 0.06                                                                              | 0.35                                                                              | 0.04                                                                               | 0.11                                                                                | 0.07                                                                                |                                                                                     | 0.09                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 10 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.39

Intersection Signal Delay: 7.3

Intersection LOS: A

Intersection Capacity Utilization 69.7%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Hazeldean & Roger Griffiths



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 31.2  |
| Total Split (s)         | 33.0  |
| Total Split (%)         | 28.7% |
| Maximum Green (s)       | 26.8  |
| Yellow Time (s)         | 3.3   |
| All-Red Time (s)        | 2.9   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.2   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | None  |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 18.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 13.0  |
| Actuated g/C Ratio      | 0.11  |
| v/c Ratio               | 0.04  |
| Control Delay           | 0.2   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.2   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.0   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 40.0  |
| Base Capacity (vph)     | 579   |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.03  |
| Intersection Summary    |       |

3: Mantra/Tillage & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |   |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (vph)       | 45                                                                                | 991                                                                               | 16                                                                                | 22                                                                                | 759                                                                               | 113                                                                               | 33                                                                                  | 0                                                                                   | 93                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Future Volume (vph)        | 45                                                                                | 991                                                                               | 16                                                                                | 22                                                                                | 759                                                                               | 113                                                                               | 33                                                                                  | 0                                                                                   | 93                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 80.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 105.0                                                                             | 55.0                                                                                |                                                                                     | 0.0                                                                                 | 35.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   | 2                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)           | 60.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                                |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.97                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.97                                                                              | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                | 0.98                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.858                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 3452                                                                              | 0                                                                                 | 1768                                                                              | 3537                                                                              | 1551                                                                              | 1768                                                                                | 1522                                                                                | 0                                                                                   | 3332                                                                                | 1569                                                                                | 0                                                                                   |
| Flt Permitted              | 0.300                                                                             |                                                                                   |                                                                                   | 0.233                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 557                                                                               | 3452                                                                              | 0                                                                                 | 434                                                                               | 3537                                                                              | 1503                                                                              | 1757                                                                                | 1522                                                                                | 0                                                                                   | 3298                                                                                | 1569                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   | 153                                                                               |                                                                                     | 330                                                                                 |                                                                                     |                                                                                     | 36                                                                                  |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                   | 150.7                                                                             |                                                                                   |                                                                                     | 289.2                                                                               |                                                                                     |                                                                                     | 233.8                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   |                                                                                     | 20.8                                                                                |                                                                                     |                                                                                     | 16.8                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 16%                                                                               | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                  | 1%                                                                                  | 3%                                                                                  | 4%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 45                                                                                | 991                                                                               | 16                                                                                | 22                                                                                | 759                                                                               | 113                                                                               | 33                                                                                  | 0                                                                                   | 93                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 45                                                                                | 1007                                                                              | 0                                                                                 | 22                                                                                | 759                                                                               | 113                                                                               | 33                                                                                  | 93                                                                                  | 0                                                                                   | 74                                                                                  | 38                                                                                  | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | R NA                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |                                                                                     |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                | Perm                                                                              | Prot                                                                                | NA                                                                                  |                                                                                     | Prot                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector Phase             | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 | 6                                                                                 | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

3: Mantra/Tillage & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                                | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 11.1                                                                              | 31.3                                                                              |                                                                                   | 11.1                                                                              | 31.3                                                                              | 31.3                                                                              | 11.5                                                                               | 31.5                                                                                |                                                                                     | 11.5                                                                                | 31.5                                                                                |                                                                                     |
| Total Split (s)         | 12.0                                                                              | 43.0                                                                              |                                                                                   | 12.0                                                                              | 43.0                                                                              | 43.0                                                                              | 28.0                                                                               | 32.0                                                                                |                                                                                     | 28.0                                                                                | 32.0                                                                                |                                                                                     |
| Total Split (%)         | 10.4%                                                                             | 37.4%                                                                             |                                                                                   | 10.4%                                                                             | 37.4%                                                                             | 37.4%                                                                             | 24.3%                                                                              | 27.8%                                                                               |                                                                                     | 24.3%                                                                               | 27.8%                                                                               |                                                                                     |
| Maximum Green (s)       | 5.9                                                                               | 36.7                                                                              |                                                                                   | 5.9                                                                               | 36.7                                                                              | 36.7                                                                              | 21.5                                                                               | 25.5                                                                                |                                                                                     | 21.5                                                                                | 25.5                                                                                |                                                                                     |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.3                                                                                | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |                                                                                     |
| All-Red Time (s)        | 2.4                                                                               | 2.6                                                                               |                                                                                   | 2.4                                                                               | 2.6                                                                               | 2.6                                                                               | 3.2                                                                                | 3.2                                                                                 |                                                                                     | 3.2                                                                                 | 3.2                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 6.1                                                                               | 6.3                                                                               |                                                                                   | 6.1                                                                               | 6.3                                                                               | 6.3                                                                               | 6.5                                                                                | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lag                                                                                | Lead                                                                                |                                                                                     | Lag                                                                                 | Lead                                                                                |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             | C-Max                                                                             | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                |                                                                                     |
| Walk Time (s)           |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                    | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 18.0                                                                              | 18.0                                                                              |                                                                                    | 18.0                                                                                |                                                                                     |                                                                                     | 18.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                    | 5                                                                                   |                                                                                     |                                                                                     | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     | 75.4                                                                              | 72.1                                                                              |                                                                                   | 71.9                                                                              | 66.8                                                                              | 66.8                                                                              | 7.8                                                                                | 13.0                                                                                |                                                                                     | 8.0                                                                                 | 15.7                                                                                |                                                                                     |
| Actuated g/C Ratio      | 0.66                                                                              | 0.63                                                                              |                                                                                   | 0.63                                                                              | 0.58                                                                              | 0.58                                                                              | 0.07                                                                               | 0.11                                                                                |                                                                                     | 0.07                                                                                | 0.14                                                                                |                                                                                     |
| v/c Ratio               | 0.10                                                                              | 0.47                                                                              |                                                                                   | 0.06                                                                              | 0.37                                                                              | 0.12                                                                              | 0.28                                                                               | 0.20                                                                                |                                                                                     | 0.32                                                                                | 0.16                                                                                |                                                                                     |
| Control Delay           | 7.1                                                                               | 17.3                                                                              |                                                                                   | 10.0                                                                              | 16.4                                                                              | 1.6                                                                               | 56.0                                                                               | 1.0                                                                                 |                                                                                     | 54.1                                                                                | 15.3                                                                                |                                                                                     |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Delay             | 7.1                                                                               | 17.3                                                                              |                                                                                   | 10.0                                                                              | 16.4                                                                              | 1.6                                                                               | 56.0                                                                               | 1.0                                                                                 |                                                                                     | 54.1                                                                                | 15.3                                                                                |                                                                                     |
| LOS                     | A                                                                                 | B                                                                                 |                                                                                   | A                                                                                 | B                                                                                 | A                                                                                 | E                                                                                  | A                                                                                   |                                                                                     | D                                                                                   | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   | 16.9                                                                              |                                                                                   |                                                                                   | 14.3                                                                              |                                                                                   |                                                                                    | 15.4                                                                                |                                                                                     |                                                                                     | 41.0                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Queue Length 50th (m)   | 3.1                                                                               | 88.3                                                                              |                                                                                   | 1.3                                                                               | 43.2                                                                              | 0.0                                                                               | 6.6                                                                                | 0.0                                                                                 |                                                                                     | 7.6                                                                                 | 0.4                                                                                 |                                                                                     |
| Queue Length 95th (m)   | 9.4                                                                               | 96.2                                                                              |                                                                                   | 5.7                                                                               | 79.3                                                                              | 4.7                                                                               | 15.5                                                                               | 0.0                                                                                 |                                                                                     | 14.2                                                                                | 8.4                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                   | 126.7                                                                             |                                                                                   |                                                                                    | 265.2                                                                               |                                                                                     |                                                                                     | 209.8                                                                               |                                                                                     |
| Turn Bay Length (m)     | 80.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 105.0                                                                             | 55.0                                                                               |                                                                                     |                                                                                     | 35.0                                                                                |                                                                                     |                                                                                     |
| Base Capacity (vph)     | 435                                                                               | 2163                                                                              |                                                                                   | 343                                                                               | 2053                                                                              | 936                                                                               | 330                                                                                | 594                                                                                 |                                                                                     | 622                                                                                 | 375                                                                                 |                                                                                     |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       | 0.10                                                                              | 0.47                                                                              |                                                                                   | 0.06                                                                              | 0.37                                                                              | 0.12                                                                              | 0.10                                                                               | 0.16                                                                                |                                                                                     | 0.12                                                                                | 0.10                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 98 (85%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.47

Intersection Signal Delay: 17.0

Intersection LOS: B

Intersection Capacity Utilization 60.1%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: Mantra/Tillage & Hazeldean

|                                                                                     |    |                                                                                     |        |                                                                                     |    |                                                                                       |    |
|-------------------------------------------------------------------------------------|----|-------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|----|---------------------------------------------------------------------------------------|----|
|  | Ø1 |  | Ø2 (R) |  | Ø4 |  | Ø3 |
| 12 s                                                                                |    | 43 s                                                                                |        | 32 s                                                                                |    | 28 s                                                                                  |    |
|  | Ø5 |  | Ø6 (R) |  | Ø8 |  | Ø7 |
| 12 s                                                                                |    | 43 s                                                                                |        | 32 s                                                                                |    | 28 s                                                                                  |    |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 281                                                                               | 944                                                                               | 188                                                                               | 5                                                                                 | 141                                                                               | 436                                                                                | 194                                                                                 | 192                                                                                 | 864                                                                                 | 282                                                                                 | 192                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 281                                                                               | 944                                                                               | 188                                                                               | 5                                                                                 | 141                                                                               | 436                                                                                | 194                                                                                 | 192                                                                                 | 864                                                                                 | 282                                                                                 | 192                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     | 75.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.98                                                                              |                                                                                   | 1.00                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3213                                                                              | 3468                                                                              | 1508                                                                              | 0                                                                                 | 3398                                                                              | 3435                                                                               | 1537                                                                                | 3300                                                                                | 3468                                                                                | 1567                                                                                | 3179                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3203                                                                              | 3468                                                                              | 1479                                                                              | 0                                                                                 | 3393                                                                              | 3435                                                                               | 1504                                                                                | 3284                                                                                | 3468                                                                                | 1538                                                                                | 3170                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 188                                                                               |                                                                                   |                                                                                   |                                                                                    | 228                                                                                 |                                                                                     |                                                                                     | 228                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 644.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 38.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                    | 4                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 8%                                                                                | 3%                                                                                | 6%                                                                                | 1%                                                                                | 2%                                                                                | 4%                                                                                 | 4%                                                                                  | 5%                                                                                  | 3%                                                                                  | 2%                                                                                  | 9%                                                                                  |
| Adj. Flow (vph)            | 7                                                                                 | 281                                                                               | 944                                                                               | 188                                                                               | 5                                                                                 | 141                                                                               | 436                                                                                | 194                                                                                 | 192                                                                                 | 864                                                                                 | 282                                                                                 | 192                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 288                                                                               | 944                                                                               | 188                                                                               | 0                                                                                 | 146                                                                               | 436                                                                                | 194                                                                                 | 192                                                                                 | 864                                                                                 | 282                                                                                 | 192                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 469   | 342   |
| Future Volume (vph)        | 469   | 342   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 200.0 |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3402  | 1508  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3402  | 1481  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 246   |
| Link Speed (k/h)           | 70    |       |
| Link Distance (m)          | 316.2 |       |
| Travel Time (s)            | 16.3  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Confl. Bikes (#/hr)        |       |       |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 5%    | 6%    |
| Adj. Flow (vph)            | 469   | 342   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 469   | 342   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | Right |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 6     |       |
| Permitted Phases           |       | 6     |
| Detector Phase             | 6     | 6     |



4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                               | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                               | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 21.0                                                                              | 21.0                                                                              | 43.0                                                                              | 43.0                                                                              | 14.0                                                                              | 14.0                                                                              | 36.0                                                                               | 36.0                                                                                | 17.0                                                                                | 36.0                                                                                | 36.0                                                                                | 17.0                                                                                |
| Total Split (%)         | 19.1%                                                                             | 19.1%                                                                             | 39.1%                                                                             | 39.1%                                                                             | 12.7%                                                                             | 12.7%                                                                             | 32.7%                                                                              | 32.7%                                                                               | 15.5%                                                                               | 32.7%                                                                               | 32.7%                                                                               | 15.5%                                                                               |
| Maximum Green (s)       | 14.5                                                                              | 14.5                                                                              | 36.5                                                                              | 36.5                                                                              | 7.5                                                                               | 7.5                                                                               | 29.5                                                                               | 29.5                                                                                | 10.5                                                                                | 29.5                                                                                | 29.5                                                                                | 10.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 13.6                                                                              | 34.4                                                                              | 34.4                                                                              |                                                                                   | 7.5                                                                               | 28.3                                                                               | 28.3                                                                                | 10.1                                                                                | 32.0                                                                                | 32.0                                                                                | 10.2                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              | 0.31                                                                              | 0.31                                                                              |                                                                                   | 0.07                                                                              | 0.26                                                                               | 0.26                                                                                | 0.09                                                                                | 0.29                                                                                | 0.29                                                                                | 0.09                                                                                |
| v/c Ratio               |                                                                                   | 0.73                                                                              | 0.87                                                                              | 0.32                                                                              |                                                                                   | 0.63                                                                              | 0.49                                                                               | 0.35                                                                                | 0.63                                                                                | 0.86                                                                                | 0.46                                                                                | 0.66                                                                                |
| Control Delay           |                                                                                   | 57.7                                                                              | 45.3                                                                              | 5.4                                                                               |                                                                                   | 57.8                                                                              | 38.9                                                                               | 12.5                                                                                | 63.1                                                                                | 39.2                                                                                | 7.5                                                                                 | 54.0                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 57.7                                                                              | 45.3                                                                              | 5.4                                                                               |                                                                                   | 57.8                                                                              | 38.9                                                                               | 12.5                                                                                | 63.1                                                                                | 39.2                                                                                | 7.5                                                                                 | 54.0                                                                                |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | D                                                                                  | B                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   | D                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 42.5                                                                              |                                                                                   |                                                                                   |                                                                                   | 35.9                                                                               |                                                                                     |                                                                                     | 36.0                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 28.4                                                                              | 90.1                                                                              | 0.0                                                                               |                                                                                   | 14.8                                                                              | 43.0                                                                               | 2.8                                                                                 | 12.1                                                                                | 88.2                                                                                | 20.7                                                                                | 19.1                                                                                |
| Queue Length 95th (m)   |                                                                                   | 41.2                                                                              | 112.7                                                                             | 13.6                                                                              |                                                                                   | #24.7                                                                             | 56.8                                                                               | 28.3                                                                                | 31.8                                                                                | #123.1                                                                              | 5.9                                                                                 | 26.2                                                                                |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 620.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                              |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Base Capacity (vph)     |                                                                                   | 423                                                                               | 1150                                                                              | 616                                                                               |                                                                                   | 231                                                                               | 921                                                                                | 570                                                                                 | 317                                                                                 | 1008                                                                                | 608                                                                                 | 305                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.68                                                                              | 0.82                                                                              | 0.31                                                                              |                                                                                   | 0.63                                                                              | 0.47                                                                               | 0.34                                                                                | 0.61                                                                                | 0.86                                                                                | 0.46                                                                                | 0.63                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 76 (69%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 36.6

Intersection LOS: D

Intersection Capacity Utilization 84.6%

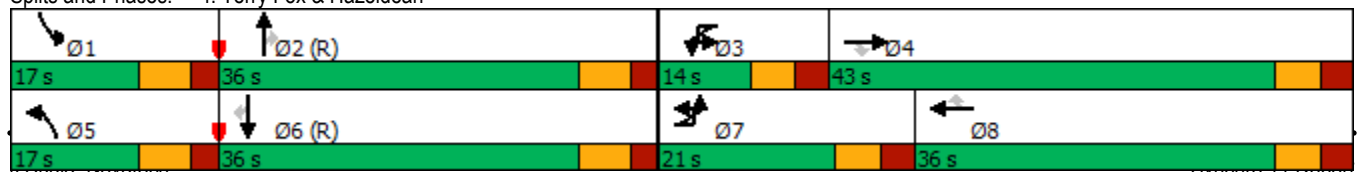
ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean

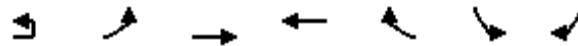


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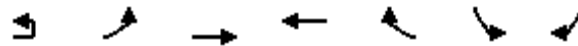
Dynamic 11 Report



| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Switch Phase            |       |       |
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 35.5  | 35.5  |
| Total Split (s)         | 36.0  | 36.0  |
| Total Split (%)         | 32.7% | 32.7% |
| Maximum Green (s)       | 29.5  | 29.5  |
| Yellow Time (s)         | 4.2   | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 22.0  | 22.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 32.0  | 32.0  |
| Actuated g/C Ratio      | 0.29  | 0.29  |
| v/c Ratio               | 0.47  | 0.57  |
| Control Delay           | 29.6  | 16.2  |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 29.6  | 16.2  |
| LOS                     | C     | B     |
| Approach Delay          | 29.7  |       |
| Approach LOS            | C     |       |
| Queue Length 50th (m)   | 41.5  | 23.9  |
| Queue Length 95th (m)   | 56.3  | 59.5  |
| Internal Link Dist (m)  | 292.2 |       |
| Turn Bay Length (m)     |       | 200.0 |
| Base Capacity (vph)     | 991   | 605   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.47  | 0.57  |
| Intersection Summary    |       |       |



| Lane Group                 | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       | ↰     | ↰↰    | ↰↰    |       | ↰     | ↰     |
| Traffic Volume (vph)       | 4     | 121   | 1111  | 873   | 72    | 74    | 68    |
| Future Volume (vph)        | 4     | 121   | 1111  | 873   | 72    | 74    | 68    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 35.0  |       |       | 0.0   | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       |       | 0     | 1     | 1     |
| Taper Length (m)           |       | 40.0  |       |       |       | 40.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  |
| Ped Bike Factor            |       | 1.00  |       | 1.00  |       | 0.99  | 0.98  |
| Frt                        |       |       |       | 0.989 |       |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1719  | 3468  | 3424  | 0     | 1768  | 1537  |
| Flt Permitted              |       | 0.292 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 526   | 3468  | 3424  | 0     | 1747  | 1500  |
| Right Turn on Red          |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 15    |       |       | 68    |
| Link Speed (k/h)           |       |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 157.6 | 314.8 |       | 401.6 |       |
| Travel Time (s)            |       |       | 9.5   | 18.9  |       | 28.9  |       |
| Confl. Peds. (#/hr)        |       | 10    |       |       | 10    | 10    | 10    |
| Peak Hour Factor           | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 1%    | 4%    | 3%    | 3%    | 1%    | 1%    | 4%    |
| Adj. Flow (vph)            | 4     | 121   | 1111  | 873   | 72    | 74    | 68    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 125   | 1111  | 945   | 0     | 74    | 68    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | L NA  | Left  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 8.0   | 4.0   |       | 4.0   |       |
| Link Offset(m)             |       |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 2     |       | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Thru  |       | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 10.0  |       | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 0.6   |       | 2.0   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex | CI+Ex | CI+Ex |       | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       |       | CI+Ex | CI+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | NA    |       | Perm  | Perm  |
| Protected Phases           |       |       | 2     | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       |       |       | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     |       | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |



| Lane Group              | EBU   | EBL   | EBT   | WBT   | WBR | SBL   | SBR   |
|-------------------------|-------|-------|-------|-------|-----|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  | 10.0  | 10.0  |     | 10.0  | 10.0  |
| Minimum Split (s)       | 16.2  | 16.2  | 16.2  | 31.2  |     | 34.1  | 34.1  |
| Total Split (s)         | 76.0  | 76.0  | 76.0  | 76.0  |     | 34.0  | 34.0  |
| Total Split (%)         | 69.1% | 69.1% | 69.1% | 69.1% |     | 30.9% | 30.9% |
| Maximum Green (s)       | 69.8  | 69.8  | 69.8  | 69.8  |     | 27.9  | 27.9  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7   | 3.7   |     | 3.3   | 3.3   |
| All-Red Time (s)        | 2.5   | 2.5   | 2.5   | 2.5   |     | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.2   | 6.2   | 6.2   |     | 6.1   | 6.1   |
| Lead/Lag                |       |       |       |       |     |       |       |
| Lead-Lag Optimize?      |       |       |       |       |     |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max | C-Max | C-Max |     | None  | None  |
| Walk Time (s)           |       |       |       | 7.0   |     | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |       |       | 18.0  |     | 21.0  | 21.0  |
| Pedestrian Calls (#/hr) |       |       |       | 10    |     | 10    | 10    |
| Act Effct Green (s)     |       | 88.3  | 88.3  | 88.3  |     | 13.9  | 13.9  |
| Actuated g/C Ratio      |       | 0.80  | 0.80  | 0.80  |     | 0.13  | 0.13  |
| v/c Ratio               |       | 0.30  | 0.40  | 0.34  |     | 0.34  | 0.27  |
| Control Delay           |       | 15.8  | 13.4  | 5.0   |     | 60.7  | 24.7  |
| Queue Delay             |       | 0.0   | 0.3   | 0.0   |     | 0.0   | 0.0   |
| Total Delay             |       | 15.8  | 13.8  | 5.0   |     | 60.7  | 24.7  |
| LOS                     |       | B     | B     | A     |     | E     | C     |
| Approach Delay          |       |       | 14.0  | 5.0   |     | 43.4  |       |
| Approach LOS            |       |       | B     | A     |     | D     |       |
| Queue Length 50th (m)   |       | 13.7  | 64.7  | 21.2  |     | 14.7  | 2.6   |
| Queue Length 95th (m)   |       | m27.4 | 113.8 | 56.6  |     | m20.6 | m9.7  |
| Internal Link Dist (m)  |       |       | 133.6 | 290.8 |     | 377.6 |       |
| Turn Bay Length (m)     |       | 35.0  |       |       |     | 30.0  |       |
| Base Capacity (vph)     |       | 422   | 2782  | 2750  |     | 443   | 431   |
| Starvation Cap Reductn  |       | 0     | 959   | 0     |     | 0     | 0     |
| Spillback Cap Reductn   |       | 0     | 0     | 0     |     | 0     | 0     |
| Storage Cap Reductn     |       | 0     | 0     | 0     |     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.30  | 0.61  | 0.34  |     | 0.17  | 0.16  |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 73 (66%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.40

Intersection Signal Delay: 12.1

Intersection LOS: B

Intersection Capacity Utilization 64.3%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Hazeldean & Edgewater



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1453                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1046                                                                                |
| Future Volume (vph)        | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1453                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1046                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.887                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                    | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1317                                                                              | 0                                                                                 | 1567                                                                              | 1516                                                                              | 0                                                                                 | 1768                                                                               | 3489                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3402                                                                                |
| Flt Permitted              | 0.693                                                                             |                                                                                   |                                                                                   | 0.755                                                                             |                                                                                   |                                                                                   | 0.255                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.145                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1284                                                                              | 1317                                                                              | 0                                                                                 | 1238                                                                              | 1516                                                                              | 0                                                                                 | 474                                                                                | 3489                                                                                | 0                                                                                   | 0                                                                                   | 265                                                                                 | 3402                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 41                                                                                |                                                                                   |                                                                                    | 3                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                    | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                    | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 33%                                                                               | 14%                                                                               | 50%                                                                               | 3%                                                                                | 1%                                                                                 | 2%                                                                                  | 3%                                                                                  | 1%                                                                                  | 3%                                                                                  | 5%                                                                                  |
| Adj. Flow (vph)            | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1453                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1046                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 14                                                                                | 4                                                                                 | 0                                                                                 | 14                                                                                | 99                                                                                | 0                                                                                 | 1                                                                                  | 1483                                                                                | 0                                                                                   | 0                                                                                   | 161                                                                                 | 1046                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                    | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        |       |
| Traffic Volume (vph)       | 12    |
| Future Volume (vph)        | 12    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1480  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1436  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 35    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 8%    |
| Adj. Flow (vph)            | 12    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 12    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | Cl+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.5                                                                              | 36.5                                                                              |                                                                                   | 36.5                                                                              | 36.5                                                                              |                                                                                   | 34.5                                                                               | 34.5                                                                                |                                                                                     | 34.5                                                                                | 34.5                                                                                | 34.5                                                                                |
| Total Split (s)         | 37.0                                                                              | 37.0                                                                              |                                                                                   | 37.0                                                                              | 37.0                                                                              |                                                                                   | 73.0                                                                               | 73.0                                                                                |                                                                                     | 73.0                                                                                | 73.0                                                                                | 73.0                                                                                |
| Total Split (%)         | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 66.4%                                                                              | 66.4%                                                                               |                                                                                     | 66.4%                                                                               | 66.4%                                                                               | 66.4%                                                                               |
| Maximum Green (s)       | 30.5                                                                              | 30.5                                                                              |                                                                                   | 30.5                                                                              | 30.5                                                                              |                                                                                   | 66.5                                                                               | 66.5                                                                                |                                                                                     | 66.5                                                                                | 66.5                                                                                | 66.5                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 3.2                                                                               | 3.2                                                                               |                                                                                   | 3.2                                                                               | 3.2                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                                | 6.5                                                                                 |                                                                                     |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 21.0                                                                                | 21.0                                                                                | 21.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 14.4                                                                              | 14.4                                                                              |                                                                                   | 14.4                                                                              | 14.4                                                                              |                                                                                   | 82.6                                                                               | 82.6                                                                                |                                                                                     |                                                                                     | 82.6                                                                                | 82.6                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.75                                                                               | 0.75                                                                                |                                                                                     |                                                                                     | 0.75                                                                                | 0.75                                                                                |
| v/c Ratio               | 0.08                                                                              | 0.02                                                                              |                                                                                   | 0.09                                                                              | 0.42                                                                              |                                                                                   | 0.00                                                                               | 0.57                                                                                |                                                                                     |                                                                                     | 0.81                                                                                | 0.41                                                                                |
| Control Delay           | 38.6                                                                              | 25.2                                                                              |                                                                                   | 61.0                                                                              | 51.7                                                                              |                                                                                   | 3.0                                                                                | 5.4                                                                                 |                                                                                     |                                                                                     | 45.2                                                                                | 6.5                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 38.6                                                                              | 25.2                                                                              |                                                                                   | 61.0                                                                              | 51.7                                                                              |                                                                                   | 3.0                                                                                | 5.4                                                                                 |                                                                                     |                                                                                     | 45.2                                                                                | 6.5                                                                                 |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | E                                                                                 | D                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | D                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 35.7                                                                              |                                                                                   |                                                                                   | 52.9                                                                              |                                                                                   |                                                                                    | 5.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 11.5                                                                                |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 2.6                                                                               | 0.2                                                                               |                                                                                   | 3.0                                                                               | 13.9                                                                              |                                                                                   | 0.0                                                                                | 4.7                                                                                 |                                                                                     |                                                                                     | 13.6                                                                                | 26.3                                                                                |
| Queue Length 95th (m)   | 6.6                                                                               | 2.6                                                                               |                                                                                   | m9.2                                                                              | 31.7                                                                              |                                                                                   | m0.1                                                                               | 28.3                                                                                |                                                                                     |                                                                                     | #70.7                                                                               | 71.5                                                                                |
| Internal Link Dist (m)  |                                                                                   | 193.1                                                                             |                                                                                   |                                                                                   | 258.1                                                                             |                                                                                   |                                                                                    | 229.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 336.0                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 65.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |                                                                                     |
| Base Capacity (vph)     | 356                                                                               | 367                                                                               |                                                                                   | 343                                                                               | 449                                                                               |                                                                                   | 355                                                                                | 2621                                                                                |                                                                                     |                                                                                     | 199                                                                                 | 2555                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.04                                                                              | 0.01                                                                              |                                                                                   | 0.04                                                                              | 0.22                                                                              |                                                                                   | 0.00                                                                               | 0.57                                                                                |                                                                                     |                                                                                     | 0.81                                                                                | 0.41                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 16 (15%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 10.1

Intersection LOS: B

Intersection Capacity Utilization 80.0%

ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 73.0  |
| Total Split (%)         | 66.4% |
| Maximum Green (s)       | 66.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 82.6  |
| Actuated g/C Ratio      | 0.75  |
| v/c Ratio               | 0.01  |
| Control Delay           | 0.2   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.2   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.5   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1087  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (vph)       | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1321                                                                                | 1                                                                                   | 0                                                                                   | 880                                                                                 | 0                                                                                   |
| Future Volume (vph)        | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1321                                                                                | 1                                                                                   | 0                                                                                   | 880                                                                                 | 0                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 35.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 | 55.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)           | 25.0                                                                              |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     | 50.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.98                                                                              |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1861                                                                              | 1553                                                                              | 0                                                                                 | 1768                                                                              | 1861                                                                              | 0                                                                                 | 1768                                                                               | 3468                                                                                | 0                                                                                   | 1861                                                                                | 3370                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   | 0.769                                                                             |                                                                                   |                                                                                   | 0.323                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1861                                                                              | 1553                                                                              | 0                                                                                 | 1422                                                                              | 1861                                                                              | 0                                                                                 | 600                                                                                | 3468                                                                                | 0                                                                                   | 1861                                                                                | 3370                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 176                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 207.5                                                                             |                                                                                   |                                                                                   | 88.7                                                                              |                                                                                   |                                                                                    | 316.2                                                                               |                                                                                     |                                                                                     | 253.3                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 14.9                                                                              |                                                                                   |                                                                                   | 10.6                                                                              |                                                                                   |                                                                                    | 16.3                                                                                |                                                                                     |                                                                                     | 13.0                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 3%                                                                                  | 1%                                                                                  | 1%                                                                                  | 6%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1321                                                                                | 1                                                                                   | 0                                                                                   | 880                                                                                 | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 3                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1322                                                                                | 0                                                                                   | 0                                                                                   | 880                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                               | Left                                                                                | Right                                                                               | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 12.0                                                                                |                                                                                     |                                                                                     | 12.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |                                                                                     |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              |                                                                                   |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.5                                                                               | 32.5                                                                                |                                                                                     | 32.5                                                                                | 32.5                                                                                |                                                                                     |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              |                                                                                   | 77.0                                                                               | 77.0                                                                                |                                                                                     | 77.0                                                                                | 77.0                                                                                |                                                                                     |
| Total Split (%)         | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 70.0%                                                                              | 70.0%                                                                               |                                                                                     | 70.0%                                                                               | 70.0%                                                                               |                                                                                     |
| Maximum Green (s)       | 26.8                                                                              | 26.8                                                                              |                                                                                   | 26.8                                                                              | 26.8                                                                              |                                                                                   | 70.5                                                                               | 70.5                                                                                |                                                                                     | 70.5                                                                                | 70.5                                                                                |                                                                                     |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 |                                                                                     |
| All-Red Time (s)        | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.5                                                                                | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                               | 19.0                                                                                |                                                                                     | 19.0                                                                                | 19.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 13.2                                                                              |                                                                                   | 13.2                                                                              |                                                                                   |                                                                                   | 102.3                                                                              | 102.3                                                                               |                                                                                     |                                                                                     | 102.3                                                                               |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.93                                                                               | 0.93                                                                                |                                                                                     |                                                                                     | 0.93                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.01                                                                              |                                                                                   | 0.01                                                                              |                                                                                   |                                                                                   | 0.02                                                                               | 0.41                                                                                |                                                                                     |                                                                                     | 0.28                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 0.0                                                                               |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                   | 9.3                                                                                | 9.0                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 0.0                                                                               |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                   | 9.3                                                                                | 9.0                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| LOS                     |                                                                                   | A                                                                                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                    | 9.0                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 0.0                                                                               |                                                                                   | 0.2                                                                               |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | 0.0                                                                               |                                                                                   | 1.4                                                                               |                                                                                   |                                                                                   | m2.0                                                                               | 152.6                                                                               |                                                                                     |                                                                                     | 1.6                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   | 183.5                                                                             |                                                                                   |                                                                                   | 64.7                                                                              |                                                                                   |                                                                                    | 292.2                                                                               |                                                                                     |                                                                                     | 229.3                                                                               |                                                                                     |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 511                                                                               |                                                                                   | 346                                                                               |                                                                                   |                                                                                   | 558                                                                                | 3224                                                                                |                                                                                     |                                                                                     | 3133                                                                                |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.01                                                                              |                                                                                   | 0.00                                                                              |                                                                                   |                                                                                   | 0.02                                                                               | 0.41                                                                                |                                                                                     |                                                                                     | 0.28                                                                                |                                                                                     |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 26 (24%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 65

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.41

Intersection Signal Delay: 5.5

Intersection LOS: A

Intersection Capacity Utilization 59.5%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Terry Fox & Tony Graham Rec



8: Terry Fox & Sobey's  
AM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1289                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 779                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1289                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 779                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 10.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 30.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.91                                                                                | 0.91                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              | 0.98                                                                              | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.910                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.994                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.997                                                                               |
| Flt Protected              |                                                                                   | 0.986                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1526                                                                              | 0                                                                                 | 0                                                                                 | 1742                                                                              | 1567                                                                              | 1581                                                                               | 5042                                                                                | 0                                                                                   | 0                                                                                   | 1722                                                                                | 3424                                                                                |
| Flt Permitted              |                                                                                   | 0.899                                                                             |                                                                                   |                                                                                   | 0.715                                                                             |                                                                                   | 0.302                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.192                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1389                                                                              | 0                                                                                 | 0                                                                                 | 1297                                                                              | 1537                                                                              | 501                                                                                | 5042                                                                                | 0                                                                                   | 0                                                                                   | 347                                                                                 | 3424                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 16                                                                                |                                                                                   |                                                                                   |                                                                                   | 109                                                                               |                                                                                    | 10                                                                                  |                                                                                     |                                                                                     |                                                                                     | 3                                                                                   |
| Link Speed (k/h)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 132.0                                                                             |                                                                                   |                                                                                   | 152.6                                                                             |                                                                                   |                                                                                    | 140.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 142.7                                                                               |
| Travel Time (s)            |                                                                                   | 15.8                                                                              |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                    | 7.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.3                                                                                 |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 29%                                                                               | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 13%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 4%                                                                                  | 4%                                                                                  |
| Adj. Flow (vph)            | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1289                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 779                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 24                                                                                | 0                                                                                 | 0                                                                                 | 31                                                                                | 52                                                                                | 8                                                                                  | 1341                                                                                | 0                                                                                   | 0                                                                                   | 31                                                                                  | 797                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                              | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 5                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |

|                            |      |    |
|----------------------------|------|----|
| Lane Group                 | SBR  | Ø9 |
| Lane Configurations        |      |    |
| Traffic Volume (vph)       | 18   |    |
| Future Volume (vph)        | 18   |    |
| Ideal Flow (vphpl)         | 1800 |    |
| Storage Length (m)         | 0.0  |    |
| Storage Lanes              | 0    |    |
| Taper Length (m)           |      |    |
| Lane Util. Factor          | 0.95 |    |
| Ped Bike Factor            |      |    |
| Frt                        |      |    |
| Flt Protected              |      |    |
| Satd. Flow (prot)          | 0    |    |
| Flt Permitted              |      |    |
| Satd. Flow (perm)          | 0    |    |
| Right Turn on Red          | Yes  |    |
| Satd. Flow (RTOR)          |      |    |
| Link Speed (k/h)           |      |    |
| Link Distance (m)          |      |    |
| Travel Time (s)            |      |    |
| Confl. Peds. (#/hr)        | 5    |    |
| Confl. Bikes (#/hr)        |      |    |
| Peak Hour Factor           | 1.00 |    |
| Heavy Vehicles (%)         | 1%   |    |
| Adj. Flow (vph)            | 18   |    |
| Shared Lane Traffic (%)    |      |    |
| Lane Group Flow (vph)      | 0    |    |
| Enter Blocked Intersection | No   |    |
| Lane Alignment             | R NA |    |
| Median Width(m)            |      |    |
| Link Offset(m)             |      |    |
| Crosswalk Width(m)         |      |    |
| Two way Left Turn Lane     |      |    |
| Headway Factor             | 1.01 |    |
| Turning Speed (k/h)        | 14   |    |
| Number of Detectors        |      |    |
| Detector Template          |      |    |
| Leading Detector (m)       |      |    |
| Trailing Detector (m)      |      |    |
| Detector 1 Position(m)     |      |    |
| Detector 1 Size(m)         |      |    |
| Detector 1 Type            |      |    |
| Detector 1 Channel         |      |    |
| Detector 1 Extend (s)      |      |    |
| Detector 1 Queue (s)       |      |    |
| Detector 1 Delay (s)       |      |    |
| Detector 2 Position(m)     |      |    |
| Detector 2 Size(m)         |      |    |
| Detector 2 Type            |      |    |
| Detector 2 Channel         |      |    |
| Detector 2 Extend (s)      |      |    |
| Turn Type                  |      |    |
| Protected Phases           | 9    |    |
| Permitted Phases           |      |    |
| Detector Phase             |      |    |

8: Terry Fox & Sobey's  
AM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 5.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 11.2                                                                               | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                | 26.0                                                                                |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 15.0                                                                               | 72.0                                                                                |                                                                                     | 57.0                                                                                | 57.0                                                                                | 57.0                                                                                |
| Total Split (%)         | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 30.0%                                                                             | 30.0%                                                                             | 30.0%                                                                             | 13.6%                                                                              | 65.5%                                                                               |                                                                                     | 51.8%                                                                               | 51.8%                                                                               | 51.8%                                                                               |
| Maximum Green (s)       | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 9.0                                                                                | 66.0                                                                                |                                                                                     | 51.0                                                                                | 51.0                                                                                | 51.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 1.8                                                                                | 1.8                                                                                 |                                                                                     | 1.8                                                                                 | 1.8                                                                                 | 1.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               | 6.0                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 6.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               |                                                                                    | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 17.0                                                                              | 17.0                                                                              |                                                                                   | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              |                                                                                    | 13.0                                                                                |                                                                                     | 13.0                                                                                | 13.0                                                                                | 13.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 |                                                                                    | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 12.8                                                                              |                                                                                   |                                                                                   | 12.8                                                                              | 12.8                                                                              | 82.6                                                                               | 82.6                                                                                |                                                                                     |                                                                                     | 80.2                                                                                | 80.2                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.12                                                                              | 0.12                                                                              | 0.75                                                                               | 0.75                                                                                |                                                                                     |                                                                                     | 0.73                                                                                | 0.73                                                                                |
| v/c Ratio               |                                                                                   | 0.14                                                                              |                                                                                   |                                                                                   | 0.21                                                                              | 0.19                                                                              | 0.02                                                                               | 0.35                                                                                |                                                                                     |                                                                                     | 0.12                                                                                | 0.32                                                                                |
| Control Delay           |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              | 1.5                                                                               | 2.8                                                                                | 4.1                                                                                 |                                                                                     |                                                                                     | 4.5                                                                                 | 2.8                                                                                 |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              | 1.5                                                                               | 2.8                                                                                | 4.1                                                                                 |                                                                                     |                                                                                     | 4.5                                                                                 | 2.8                                                                                 |
| LOS                     |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 | A                                                                                 | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 17.8                                                                              |                                                                                   |                                                                                    | 4.1                                                                                 |                                                                                     |                                                                                     |                                                                                     | 2.9                                                                                 |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 1.5                                                                               |                                                                                   |                                                                                   | 5.8                                                                               | 0.0                                                                               | 0.3                                                                                | 38.4                                                                                |                                                                                     |                                                                                     | 0.4                                                                                 | 5.0                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 12.4                                                                              | 0.0                                                                               | m0.3                                                                               | 25.9                                                                                |                                                                                     |                                                                                     | m2.3                                                                                | 18.0                                                                                |
| Internal Link Dist (m)  |                                                                                   | 108.0                                                                             |                                                                                   |                                                                                   | 128.6                                                                             |                                                                                   |                                                                                    | 116.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 118.7                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 306                                                                               | 446                                                                               | 464                                                                                | 3788                                                                                |                                                                                     |                                                                                     | 252                                                                                 | 2496                                                                                |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 362                                                                                 |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.07                                                                              |                                                                                   |                                                                                   | 0.10                                                                              | 0.12                                                                              | 0.02                                                                               | 0.35                                                                                |                                                                                     |                                                                                     | 0.12                                                                                | 0.37                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 80 (73%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.35

Intersection Signal Delay: 4.3

Intersection LOS: A

Intersection Capacity Utilization 64.4%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Terry Fox & Sobey's



|                         |     |     |
|-------------------------|-----|-----|
| Lane Group              | SBR | Ø9  |
| Switch Phase            |     |     |
| Minimum Initial (s)     |     | 3.0 |
| Minimum Split (s)       |     | 5.0 |
| Total Split (s)         |     | 5.0 |
| Total Split (%)         |     | 5%  |
| Maximum Green (s)       |     | 3.0 |
| Yellow Time (s)         |     | 2.0 |
| All-Red Time (s)        |     | 0.0 |
| Lost Time Adjust (s)    |     |     |
| Total Lost Time (s)     |     |     |
| Lead/Lag                |     |     |
| Lead-Lag Optimize?      |     |     |
| Vehicle Extension (s)   |     | 3.0 |
| Recall Mode             |     | Max |
| Walk Time (s)           |     |     |
| Flash Dont Walk (s)     |     |     |
| Pedestrian Calls (#/hr) |     |     |
| Act Effct Green (s)     |     |     |
| Actuated g/C Ratio      |     |     |
| v/c Ratio               |     |     |
| Control Delay           |     |     |
| Queue Delay             |     |     |
| Total Delay             |     |     |
| LOS                     |     |     |
| Approach Delay          |     |     |
| Approach LOS            |     |     |
| Queue Length 50th (m)   |     |     |
| Queue Length 95th (m)   |     |     |
| Internal Link Dist (m)  |     |     |
| Turn Bay Length (m)     |     |     |
| Base Capacity (vph)     |     |     |
| Starvation Cap Reductn  |     |     |
| Spillback Cap Reductn   |     |     |
| Storage Cap Reductn     |     |     |
| Reduced v/c Ratio       |     |     |
| Intersection Summary    |     |     |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                  | 1278                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 719                                                                                 |
| Future Volume (vph)        | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                  | 1278                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 719                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 15.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 65.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 120.0                                                                               |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 20.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.910                                                                             |                                                                                   |                                                                                   | 0.857                                                                             |                                                                                   |                                                                                    | 0.995                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1462                                                                              | 0                                                                                 | 1734                                                                              | 1555                                                                              | 0                                                                                 | 1069                                                                               | 3481                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3435                                                                                |
| Flt Permitted              | 0.689                                                                             |                                                                                   |                                                                                   | 0.741                                                                             |                                                                                   |                                                                                   | 0.375                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.182                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1276                                                                              | 1462                                                                              | 0                                                                                 | 1345                                                                              | 1555                                                                              | 0                                                                                 | 420                                                                                | 3481                                                                                | 0                                                                                   | 0                                                                                   | 338                                                                                 | 3435                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 15                                                                                |                                                                                   |                                                                                   | 57                                                                                |                                                                                   |                                                                                    | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 40                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 65.4                                                                              |                                                                                   |                                                                                   | 381.2                                                                             |                                                                                   |                                                                                    | 479.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 200.7                                                                               |
| Travel Time (s)            |                                                                                   | 4.7                                                                               |                                                                                   |                                                                                   | 34.3                                                                              |                                                                                   |                                                                                    | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     | 10.3                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 10                                                                                  |                                                                                     | 10                                                                                  |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 20%                                                                               | 13%                                                                               | 3%                                                                                | 20%                                                                               | 1%                                                                                | 67%                                                                                | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 4%                                                                                  |
| Adj. Flow (vph)            | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                  | 1278                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 719                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 20                                                                                | 25                                                                                | 0                                                                                 | 30                                                                                | 106                                                                               | 0                                                                                 | 6                                                                                  | 1319                                                                                | 0                                                                                   | 0                                                                                   | 77                                                                                  | 719                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 10    |
| Future Volume (vph)        | 10    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 55.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1531  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 30    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 10    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 10    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |



|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 28.3                                                                               | 28.3                                                                                |                                                                                     | 28.3                                                                                | 28.3                                                                                | 28.3                                                                                |
| Total Split (s)         | 38.0                                                                              | 38.0                                                                              |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 72.0                                                                               | 72.0                                                                                |                                                                                     | 72.0                                                                                | 72.0                                                                                | 72.0                                                                                |
| Total Split (%)         | 34.5%                                                                             | 34.5%                                                                             |                                                                                   | 34.5%                                                                             | 34.5%                                                                             |                                                                                   | 65.5%                                                                              | 65.5%                                                                               |                                                                                     | 65.5%                                                                               | 65.5%                                                                               | 65.5%                                                                               |
| Maximum Green (s)       | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 65.7                                                                               | 65.7                                                                                |                                                                                     | 65.7                                                                                | 65.7                                                                                | 65.7                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.1                                                                                | 2.1                                                                                 |                                                                                     | 2.1                                                                                 | 2.1                                                                                 | 2.1                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.3                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 15.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 10                                                                                 | 10                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 14.2                                                                              | 14.2                                                                              |                                                                                   | 14.2                                                                              | 14.2                                                                              |                                                                                   | 83.5                                                                               | 83.5                                                                                |                                                                                     |                                                                                     | 83.5                                                                                | 83.5                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.76                                                                               | 0.76                                                                                |                                                                                     |                                                                                     | 0.76                                                                                | 0.76                                                                                |
| v/c Ratio               | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.17                                                                              | 0.42                                                                              |                                                                                   | 0.02                                                                               | 0.50                                                                                |                                                                                     |                                                                                     | 0.30                                                                                | 0.28                                                                                |
| Control Delay           | 40.0                                                                              | 23.1                                                                              |                                                                                   | 41.5                                                                              | 25.6                                                                              |                                                                                   | 6.0                                                                                | 7.0                                                                                 |                                                                                     |                                                                                     | 19.4                                                                                | 11.1                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 40.0                                                                              | 23.1                                                                              |                                                                                   | 41.5                                                                              | 25.6                                                                              |                                                                                   | 6.0                                                                                | 7.0                                                                                 |                                                                                     |                                                                                     | 19.4                                                                                | 11.1                                                                                |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 30.6                                                                              |                                                                                   |                                                                                   | 29.1                                                                              |                                                                                   |                                                                                    | 7.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 11.8                                                                                |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 3.7                                                                               | 1.9                                                                               |                                                                                   | 5.6                                                                               | 9.3                                                                               |                                                                                   | 0.2                                                                                | 35.3                                                                                |                                                                                     |                                                                                     | 7.1                                                                                 | 34.4                                                                                |
| Queue Length 95th (m)   | 8.4                                                                               | 7.5                                                                               |                                                                                   | 11.3                                                                              | 19.8                                                                              |                                                                                   | 2.0                                                                                | 97.0                                                                                |                                                                                     |                                                                                     | 22.2                                                                                | 63.2                                                                                |
| Internal Link Dist (m)  |                                                                                   | 41.4                                                                              |                                                                                   |                                                                                   | 357.2                                                                             |                                                                                   |                                                                                    | 455.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 176.7                                                                               |
| Turn Bay Length (m)     | 15.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 120.0                                                                               |                                                                                     |
| Base Capacity (vph)     | 371                                                                               | 435                                                                               |                                                                                   | 391                                                                               | 492                                                                               |                                                                                   | 318                                                                                | 2642                                                                                |                                                                                     |                                                                                     | 256                                                                                 | 2606                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.05                                                                              | 0.06                                                                              |                                                                                   | 0.08                                                                              | 0.22                                                                              |                                                                                   | 0.02                                                                               | 0.50                                                                                |                                                                                     |                                                                                     | 0.30                                                                                | 0.28                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 40 (36%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 10.5

Intersection LOS: B

Intersection Capacity Utilization 73.5%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Terry Fox & Halkirk/Winchester



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 28.3  |
| Total Split (s)         | 72.0  |
| Total Split (%)         | 65.5% |
| Maximum Green (s)       | 65.7  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.1   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.3   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 15.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 83.5  |
| Actuated g/C Ratio      | 0.76  |
| v/c Ratio               | 0.01  |
| Control Delay           | 6.1   |
| Queue Delay             | 0.0   |
| Total Delay             | 6.1   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.2   |
| Queue Length 95th (m)   | m1.0  |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 55.0  |
| Base Capacity (vph)     | 1168  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                        | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | NBL                                                                               | NBR                                                                               |
| Lane Configurations               |  |                                                                                   |  |  |  |                                                                                   |
| Traffic Volume (vph)              | 1167                                                                              | 4                                                                                 | 16                                                                                | 902                                                                               | 8                                                                                 | 37                                                                                |
| Future Volume (vph)               | 1167                                                                              | 4                                                                                 | 16                                                                                | 902                                                                               | 8                                                                                 | 37                                                                                |
| Ideal Flow (vphpl)                | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)                |                                                                                   | 0.0                                                                               | 85.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                               |
| Storage Lanes                     |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |
| Taper Length (m)                  |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   | 10.0                                                                              |                                                                                   |
| Lane Util. Factor                 | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              |
| Ped Bike Factor                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Frt                               | 0.999                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.889                                                                             |                                                                                   |
| Flt Protected                     |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   | 0.991                                                                             |                                                                                   |
| Satd. Flow (prot)                 | 3498                                                                              | 0                                                                                 | 1751                                                                              | 3502                                                                              | 1624                                                                              | 0                                                                                 |
| Flt Permitted                     |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   | 0.991                                                                             |                                                                                   |
| Satd. Flow (perm)                 | 3498                                                                              | 0                                                                                 | 1751                                                                              | 3502                                                                              | 1624                                                                              | 0                                                                                 |
| Link Speed (k/h)                  | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                | 50                                                                                |                                                                                   |
| Link Distance (m)                 | 150.7                                                                             |                                                                                   |                                                                                   | 644.5                                                                             | 279.6                                                                             |                                                                                   |
| Travel Time (s)                   | 10.9                                                                              |                                                                                   |                                                                                   | 46.4                                                                              | 20.1                                                                              |                                                                                   |
| Confl. Peds. (#/hr)               |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Peak Hour Factor                  | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Adj. Flow (vph)                   | 1167                                                                              | 4                                                                                 | 16                                                                                | 902                                                                               | 8                                                                                 | 37                                                                                |
| Shared Lane Traffic (%)           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)             | 1171                                                                              | 0                                                                                 | 16                                                                                | 902                                                                               | 45                                                                                | 0                                                                                 |
| Enter Blocked Intersection        | No                                                                                | No                                                                                | Yes                                                                               | Yes                                                                               | No                                                                                | No                                                                                |
| Lane Alignment                    | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               | 4.0                                                                               |                                                                                   |
| Link Offset(m)                    | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)                | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor                    | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)               |                                                                                   | 97                                                                                | 97                                                                                |                                                                                   | 97                                                                                | 97                                                                                |
| Sign Control                      | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              | Stop                                                                              |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Area Type:                        | Other                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Control Type:                     | Unsignalized                                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization | 44.2%                                                                             |                                                                                   |                                                                                   | ICU Level of Service A                                                            |                                                                                   |                                                                                   |
| Analysis Period (min)             | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |   |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 312                                                                               | 1119                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1478                                                                                | 113                                                                                 | 21                                                                                  | 293                                                                                 | 136                                                                                 | 149                                                                                 |
| Future Volume (vph)        | 2                                                                                 | 312                                                                               | 1119                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1478                                                                                | 113                                                                                 | 21                                                                                  | 293                                                                                 | 136                                                                                 | 149                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                     |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 0.99                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3537                                                                                | 1582                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3426                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3391                                                                              | 3537                                                                                | 1555                                                                                | 1746                                                                                | 3502                                                                                | 1539                                                                                | 3409                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 128                                                                                 |                                                                                     |                                                                                     | 136                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                               |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                                |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 312                                                                               | 1119                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1478                                                                                | 113                                                                                 | 21                                                                                  | 293                                                                                 | 136                                                                                 | 149                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 314                                                                               | 1141                                                                              | 0                                                                                 | 0                                                                                 | 185                                                                               | 1478                                                                                | 113                                                                                 | 21                                                                                  | 293                                                                                 | 136                                                                                 | 149                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 97                                                                                | 14                                                                                | 97                                                                                |                                                                                     | 14                                                                                  | 97                                                                                  |                                                                                     | 97                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 473   | 404   |
| Future Volume (vph)        | 473   | 404   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 60.0  |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3502  | 1582  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3502  | 1555  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 173   |
| Link Speed (k/h)           | 50    |       |
| Link Distance (m)          | 251.2 |       |
| Travel Time (s)            | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 2%    | 1%    |
| Adj. Flow (vph)            | 473   | 404   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 473   | 404   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | R NA  |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 4     |       |
| Permitted Phases           |       | 4     |
| Detector Phase             | 4     | 4     |
| Switch Phase               |       |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 61.0                                                                              |                                                                                   | 15.0                                                                              | 15.0                                                                              | 60.0                                                                                | 60.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 12.3%                                                                             | 12.3%                                                                             | 46.9%                                                                             |                                                                                   | 11.5%                                                                             | 11.5%                                                                             | 46.2%                                                                               | 46.2%                                                                               | 9.2%                                                                                | 32.3%                                                                               | 32.3%                                                                               | 9.2%                                                                                |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 54.9                                                                              |                                                                                   | 8.9                                                                               | 8.9                                                                               | 53.9                                                                                | 53.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                 | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                               | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                                | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 17.3                                                                              | 64.2                                                                              |                                                                                   |                                                                                   | 10.7                                                                              | 57.6                                                                                | 57.6                                                                                | 5.8                                                                                 | 24.8                                                                                | 24.8                                                                                | 5.9                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.13                                                                              | 0.49                                                                              |                                                                                   |                                                                                   | 0.08                                                                              | 0.44                                                                                | 0.44                                                                                | 0.04                                                                                | 0.19                                                                                | 0.19                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.69                                                                              | 0.66                                                                              |                                                                                   |                                                                                   | 0.66                                                                              | 0.94                                                                                | 0.15                                                                                | 0.27                                                                                | 0.44                                                                                | 0.34                                                                                | 0.96                                                                                |
| Control Delay           |                                                                                   | 62.9                                                                              | 29.0                                                                              |                                                                                   |                                                                                   | 82.2                                                                              | 37.9                                                                                | 2.2                                                                                 | 68.8                                                                                | 46.9                                                                                | 8.2                                                                                 | 124.1                                                                               |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 62.9                                                                              | 29.0                                                                              |                                                                                   |                                                                                   | 82.2                                                                              | 37.9                                                                                | 2.2                                                                                 | 68.8                                                                                | 46.9                                                                                | 8.2                                                                                 | 124.1                                                                               |
| LOS                     |                                                                                   | E                                                                                 | C                                                                                 |                                                                                   |                                                                                   | F                                                                                 | D                                                                                   | A                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   | F                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 36.3                                                                              |                                                                                   |                                                                                   |                                                                                   | 40.2                                                                                |                                                                                     |                                                                                     | 36.2                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 36.7                                                                              | 112.5                                                                             |                                                                                   |                                                                                   | 18.9                                                                              | ~197.1                                                                              | 5.2                                                                                 | 4.9                                                                                 | 31.4                                                                                | 0.0                                                                                 | 18.4                                                                                |
| Queue Length 95th (m)   |                                                                                   | #73.1                                                                             | 144.4                                                                             |                                                                                   |                                                                                   | #39.0                                                                             | #234.6                                                                              | m3.0                                                                                | 13.1                                                                                | 40.3                                                                                | 13.9                                                                                | #38.4                                                                               |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                               |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 457                                                                               | 1724                                                                              |                                                                                   |                                                                                   | 280                                                                               | 1567                                                                                | 760                                                                                 | 79                                                                                  | 967                                                                                 | 523                                                                                 | 155                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.69                                                                              | 0.66                                                                              |                                                                                   |                                                                                   | 0.66                                                                              | 0.94                                                                                | 0.15                                                                                | 0.27                                                                                | 0.30                                                                                | 0.26                                                                                | 0.96                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 15 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 42.1

Intersection LOS: D

Intersection Capacity Utilization 104.4%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

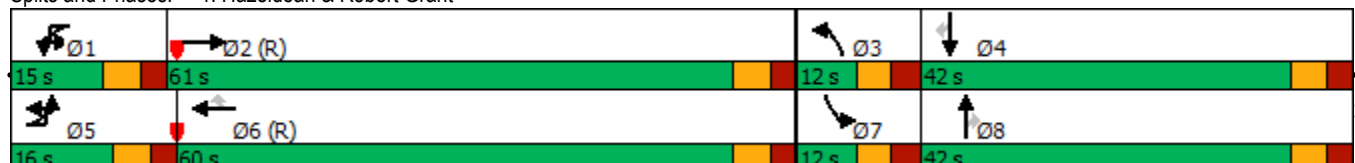
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Hazeldean & Robert Grant





| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 41.1  | 41.1  |
| Total Split (s)         | 42.0  | 42.0  |
| Total Split (%)         | 32.3% | 32.3% |
| Maximum Green (s)       | 35.9  | 35.9  |
| Yellow Time (s)         | 3.3   | 3.3   |
| All-Red Time (s)        | 2.8   | 2.8   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.1   | 6.1   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 28.0  | 28.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 29.6  | 29.6  |
| Actuated g/C Ratio      | 0.23  | 0.23  |
| v/c Ratio               | 0.59  | 0.83  |
| Control Delay           | 47.6  | 41.6  |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 47.6  | 41.6  |
| LOS                     | D     | D     |
| Approach Delay          | 56.4  |       |
| Approach LOS            | E     |       |
| Queue Length 50th (m)   | 53.7  | 55.6  |
| Queue Length 95th (m)   | 64.6  | 86.3  |
| Internal Link Dist (m)  | 227.2 |       |
| Turn Bay Length (m)     |       | 60.0  |
| Base Capacity (vph)     | 967   | 554   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.49  | 0.73  |
| Intersection Summary    |       |       |

2: Hazeldean & Roger Griffiths  
PM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |  |
| Traffic Volume (vph)       | 166                                                                               | 1227                                                                              | 104                                                                               | 52                                                                                | 1467                                                                              | 61                                                                                | 102                                                                                | 0                                                                                   | 39                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Future Volume (vph)        | 166                                                                               | 1227                                                                              | 104                                                                               | 52                                                                                | 1467                                                                              | 61                                                                                | 102                                                                                | 0                                                                                   | 39                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 75.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 180.0                                                                             | 0.0                                                                                |                                                                                     | 0.0                                                                                 | 40.0                                                                                |                                                                                     | 40.0                                                                                |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   | 0.97                                                                              | 0.99                                                                               | 0.98                                                                                |                                                                                     | 0.99                                                                                |                                                                                     | 0.98                                                                                |
| Frt                        |                                                                                   | 0.988                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 3483                                                                              | 0                                                                                 | 1751                                                                              | 3502                                                                              | 1582                                                                              | 1751                                                                               | 1536                                                                                | 0                                                                                   | 1768                                                                                | 1843                                                                                | 1582                                                                                |
| Flt Permitted              | 0.113                                                                             |                                                                                   |                                                                                   | 0.206                                                                             |                                                                                   |                                                                                   | 0.757                                                                              |                                                                                     |                                                                                     | 0.732                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 210                                                                               | 3483                                                                              | 0                                                                                 | 379                                                                               | 3502                                                                              | 1530                                                                              | 1384                                                                               | 1536                                                                                | 0                                                                                   | 1352                                                                                | 1843                                                                                | 1551                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 16                                                                                |                                                                                   |                                                                                   |                                                                                   | 79                                                                                |                                                                                    | 104                                                                                 |                                                                                     |                                                                                     |                                                                                     | 201                                                                                 |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                    | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 297.5                                                                             |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                    | 259.5                                                                               |                                                                                     |                                                                                     | 237.4                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 17.9                                                                              |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                    | 18.7                                                                                |                                                                                     |                                                                                     | 17.1                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                 | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 166                                                                               | 1227                                                                              | 104                                                                               | 52                                                                                | 1467                                                                              | 61                                                                                | 102                                                                                | 0                                                                                   | 39                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 166                                                                               | 1331                                                                              | 0                                                                                 | 52                                                                                | 1467                                                                              | 61                                                                                | 102                                                                                | 39                                                                                  | 0                                                                                   | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 97                                                                                | 97                                                                                |                                                                                   | 14                                                                                | 97                                                                                 |                                                                                     | 97                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                | Right                                                                               |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                |                                                                                     | Perm                                                                                |
| Protected Phases           | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                 | 8                                                                                  |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     | 4                                                                                   |
| Detector Phase             | 5                                                                                 | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 | 6                                                                                 | 8                                                                                  | 8                                                                                   |                                                                                     | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



2: Hazeldean & Roger Griffiths  
PM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 11.2                                                                              | 31.3                                                                              |                                                                                   | 31.3                                                                              | 31.3                                                                              | 31.3                                                                              | 31.2                                                                               | 31.2                                                                                |                                                                                     | 31.2                                                                                | 31.2                                                                                | 31.2                                                                                |
| Total Split (s)         | 20.0                                                                              | 97.0                                                                              |                                                                                   | 77.0                                                                              | 77.0                                                                              | 77.0                                                                              | 33.0                                                                               | 33.0                                                                                |                                                                                     | 33.0                                                                                | 33.0                                                                                | 33.0                                                                                |
| Total Split (%)         | 15.4%                                                                             | 74.6%                                                                             |                                                                                   | 59.2%                                                                             | 59.2%                                                                             | 59.2%                                                                             | 25.4%                                                                              | 25.4%                                                                               |                                                                                     | 25.4%                                                                               | 25.4%                                                                               | 25.4%                                                                               |
| Maximum Green (s)       | 13.8                                                                              | 90.7                                                                              |                                                                                   | 70.7                                                                              | 70.7                                                                              | 70.7                                                                              | 26.8                                                                               | 26.8                                                                                |                                                                                     | 26.8                                                                                | 26.8                                                                                | 26.8                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.3                                                                                | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.5                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                               | 2.6                                                                               | 2.6                                                                               | 2.9                                                                                | 2.9                                                                                 |                                                                                     | 2.9                                                                                 | 2.9                                                                                 | 2.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.2                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               | 6.3                                                                               | 6.2                                                                                | 6.2                                                                                 |                                                                                     | 6.2                                                                                 | 6.2                                                                                 | 6.2                                                                                 |
| Lead/Lag                | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               | Lag                                                                               | Lag                                                                               |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | C-Max                                                                             |                                                                                   | C-Max                                                                             | C-Max                                                                             | C-Max                                                                             | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   | 18.0                                                                              |                                                                                   | 18.0                                                                              | 18.0                                                                              | 18.0                                                                              | 18.0                                                                               | 18.0                                                                                |                                                                                     | 18.0                                                                                | 18.0                                                                                | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 101.7                                                                             | 101.6                                                                             |                                                                                   | 84.9                                                                              | 84.9                                                                              | 84.9                                                                              | 15.9                                                                               | 15.9                                                                                |                                                                                     | 15.9                                                                                |                                                                                     | 15.9                                                                                |
| Actuated g/C Ratio      | 0.78                                                                              | 0.78                                                                              |                                                                                   | 0.65                                                                              | 0.65                                                                              | 0.65                                                                              | 0.12                                                                               | 0.12                                                                                |                                                                                     | 0.12                                                                                |                                                                                     | 0.12                                                                                |
| v/c Ratio               | 0.57                                                                              | 0.49                                                                              |                                                                                   | 0.21                                                                              | 0.64                                                                              | 0.06                                                                              | 0.60                                                                               | 0.14                                                                                |                                                                                     | 0.57                                                                                |                                                                                     | 0.19                                                                                |
| Control Delay           | 24.0                                                                              | 10.4                                                                              |                                                                                   | 3.1                                                                               | 6.4                                                                               | 0.1                                                                               | 67.6                                                                               | 1.1                                                                                 |                                                                                     | 65.8                                                                                |                                                                                     | 1.2                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay             | 24.0                                                                              | 10.4                                                                              |                                                                                   | 3.1                                                                               | 6.4                                                                               | 0.1                                                                               | 67.6                                                                               | 1.1                                                                                 |                                                                                     | 65.8                                                                                |                                                                                     | 1.2                                                                                 |
| LOS                     | C                                                                                 | B                                                                                 |                                                                                   | A                                                                                 | A                                                                                 | A                                                                                 | E                                                                                  | A                                                                                   |                                                                                     | E                                                                                   |                                                                                     | A                                                                                   |
| Approach Delay          |                                                                                   | 11.9                                                                              |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                    | 49.2                                                                                |                                                                                     |                                                                                     | 38.2                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Queue Length 50th (m)   | 21.9                                                                              | 55.7                                                                              |                                                                                   | 0.6                                                                               | 8.6                                                                               | 0.0                                                                               | 23.4                                                                               | 0.0                                                                                 |                                                                                     | 21.5                                                                                |                                                                                     | 0.0                                                                                 |
| Queue Length 95th (m)   | m46.5                                                                             | m117.1                                                                            |                                                                                   | m0.8                                                                              | 9.8                                                                               | m0.0                                                                              | 37.4                                                                               | 0.0                                                                                 |                                                                                     | 34.9                                                                                |                                                                                     | 0.0                                                                                 |
| Internal Link Dist (m)  |                                                                                   | 273.5                                                                             |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                    | 235.5                                                                               |                                                                                     |                                                                                     | 213.4                                                                               |                                                                                     |
| Turn Bay Length (m)     | 75.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 180.0                                                                             |                                                                                    |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     | 40.0                                                                                |
| Base Capacity (vph)     | 334                                                                               | 2724                                                                              |                                                                                   | 247                                                                               | 2288                                                                              | 1027                                                                              | 285                                                                                | 399                                                                                 |                                                                                     | 278                                                                                 |                                                                                     | 479                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       | 0.50                                                                              | 0.49                                                                              |                                                                                   | 0.21                                                                              | 0.64                                                                              | 0.06                                                                              | 0.36                                                                               | 0.10                                                                                |                                                                                     | 0.34                                                                                |                                                                                     | 0.15                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 114 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 12.0

Intersection LOS: B

Intersection Capacity Utilization 82.0%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Hazeldean & Roger Griffiths



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 1                                                                                 | 82                                                                                | 1129                                                                              | 33                                                                                | 89                                                                                | 1425                                                                              | 212                                                                                | 26                                                                                  | 2                                                                                   | 43                                                                                  | 177                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 1                                                                                 | 82                                                                                | 1129                                                                              | 33                                                                                | 89                                                                                | 1425                                                                              | 212                                                                                | 26                                                                                  | 2                                                                                   | 43                                                                                  | 177                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 80.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 105.0                                                                              | 55.0                                                                                |                                                                                     | 0.0                                                                                 | 35.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   |                                                                                     | 0                                                                                   | 2                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 60.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                    | 35.0                                                                                |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.97                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.95                                                                               | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                | 0.98                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.996                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                              |                                                                                     | 0.857                                                                               |                                                                                     |                                                                                     | 0.851                                                                               |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1768                                                                              | 3518                                                                              | 0                                                                                 | 1701                                                                              | 3537                                                                              | 1582                                                                               | 1406                                                                                | 1565                                                                                | 0                                                                                   | 3431                                                                                | 1553                                                                                |
| Flt Permitted              |                                                                                   | 0.097                                                                             |                                                                                   |                                                                                   | 0.161                                                                             |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 181                                                                               | 3518                                                                              | 0                                                                                 | 288                                                                               | 3537                                                                              | 1510                                                                               | 1397                                                                                | 1565                                                                                | 0                                                                                   | 3389                                                                                | 1553                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   | 195                                                                                |                                                                                     | 43                                                                                  |                                                                                     |                                                                                     | 143                                                                                 |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                    |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |
| Link Distance (m)          |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                   | 150.7                                                                             |                                                                                    |                                                                                     | 289.2                                                                               |                                                                                     |                                                                                     | 233.8                                                                               |
| Travel Time (s)            |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                    |                                                                                     | 20.8                                                                                |                                                                                     |                                                                                     | 16.8                                                                                |
| Confl. Peds. (#/hr)        |                                                                                   | 10                                                                                |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 10                                                                                 | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 5%                                                                                | 1%                                                                                | 1%                                                                                 | 27%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 1                                                                                 | 82                                                                                | 1129                                                                              | 33                                                                                | 89                                                                                | 1425                                                                              | 212                                                                                | 26                                                                                  | 2                                                                                   | 43                                                                                  | 177                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 83                                                                                | 1162                                                                              | 0                                                                                 | 89                                                                                | 1425                                                                              | 212                                                                                | 26                                                                                  | 45                                                                                  | 0                                                                                   | 177                                                                                 | 144                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | R NA                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                               | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                    |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                    |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                 | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                  | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                              | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                                | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                                | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                    |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                    |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                    |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | pm+pt                                                                             | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                | Perm                                                                               | Prot                                                                                | NA                                                                                  |                                                                                     | Prot                                                                                | NA                                                                                  |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                    | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |
| Permitted Phases           | 2                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                  |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 | 6                                                                                  | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |      |
|----------------------------|------|
| Lane Group                 | SBR  |
| Lane Configurations        |      |
| Traffic Volume (vph)       | 143  |
| Future Volume (vph)        | 143  |
| Ideal Flow (vphpl)         | 1800 |
| Storage Length (m)         | 0.0  |
| Storage Lanes              | 0    |
| Taper Length (m)           |      |
| Lane Util. Factor          | 1.00 |
| Ped Bike Factor            |      |
| Frt                        |      |
| Flt Protected              |      |
| Satd. Flow (prot)          | 0    |
| Flt Permitted              |      |
| Satd. Flow (perm)          | 0    |
| Right Turn on Red          | Yes  |
| Satd. Flow (RTOR)          |      |
| Link Speed (k/h)           |      |
| Link Distance (m)          |      |
| Travel Time (s)            |      |
| Confl. Peds. (#/hr)        | 5    |
| Peak Hour Factor           | 1.00 |
| Heavy Vehicles (%)         | 1%   |
| Adj. Flow (vph)            | 143  |
| Shared Lane Traffic (%)    |      |
| Lane Group Flow (vph)      | 0    |
| Enter Blocked Intersection | No   |
| Lane Alignment             | R NA |
| Median Width(m)            |      |
| Link Offset(m)             |      |
| Crosswalk Width(m)         |      |
| Two way Left Turn Lane     |      |
| Headway Factor             | 1.01 |
| Turning Speed (k/h)        | 14   |
| Number of Detectors        |      |
| Detector Template          |      |
| Leading Detector (m)       |      |
| Trailing Detector (m)      |      |
| Detector 1 Position(m)     |      |
| Detector 1 Size(m)         |      |
| Detector 1 Type            |      |
| Detector 1 Channel         |      |
| Detector 1 Extend (s)      |      |
| Detector 1 Queue (s)       |      |
| Detector 1 Delay (s)       |      |
| Detector 2 Position(m)     |      |
| Detector 2 Size(m)         |      |
| Detector 2 Type            |      |
| Detector 2 Channel         |      |
| Detector 2 Extend (s)      |      |
| Turn Type                  |      |
| Protected Phases           |      |
| Permitted Phases           |      |
| Detector Phase             |      |
| Switch Phase               |      |

3: Mantra/Tillage & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 10.0                                                                              | 10.0                                                                               | 5.0                                                                                 | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 10.0                                                                                |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 31.3                                                                              |                                                                                   | 11.1                                                                              | 31.3                                                                              | 31.3                                                                               | 11.5                                                                                | 31.5                                                                                |                                                                                     | 11.5                                                                                | 31.5                                                                                |
| Total Split (s)         | 17.0                                                                              | 17.0                                                                              | 53.0                                                                              |                                                                                   | 17.0                                                                              | 53.0                                                                              | 53.0                                                                               | 28.0                                                                                | 32.0                                                                                |                                                                                     | 28.0                                                                                | 32.0                                                                                |
| Total Split (%)         | 13.1%                                                                             | 13.1%                                                                             | 40.8%                                                                             |                                                                                   | 13.1%                                                                             | 40.8%                                                                             | 40.8%                                                                              | 21.5%                                                                               | 24.6%                                                                               |                                                                                     | 21.5%                                                                               | 24.6%                                                                               |
| Maximum Green (s)       | 10.9                                                                              | 10.9                                                                              | 46.7                                                                              |                                                                                   | 10.9                                                                              | 46.7                                                                              | 46.7                                                                               | 21.5                                                                                | 25.5                                                                                |                                                                                     | 21.5                                                                                | 25.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.3                                                                                 | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.6                                                                               |                                                                                   | 2.4                                                                               | 2.6                                                                               | 2.6                                                                                | 3.2                                                                                 | 3.2                                                                                 |                                                                                     | 3.2                                                                                 | 3.2                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.3                                                                               |                                                                                   | 6.1                                                                               | 6.3                                                                               | 6.3                                                                                | 6.5                                                                                 | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lag                                                                               | Lag                                                                                | Lag                                                                                 | Lead                                                                                |                                                                                     | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             | C-Max                                                                              | None                                                                                | None                                                                                |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                                |                                                                                     | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 18.0                                                                              | 18.0                                                                               |                                                                                     | 18.0                                                                                |                                                                                     |                                                                                     | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 10                                                                                | 10                                                                                 |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 82.0                                                                              | 74.0                                                                              |                                                                                   | 83.6                                                                              | 74.7                                                                              | 74.7                                                                               | 10.6                                                                                | 13.0                                                                                |                                                                                     | 12.3                                                                                | 16.4                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.63                                                                              | 0.57                                                                              |                                                                                   | 0.64                                                                              | 0.57                                                                              | 0.57                                                                               | 0.08                                                                                | 0.10                                                                                |                                                                                     | 0.09                                                                                | 0.13                                                                                |
| v/c Ratio               |                                                                                   | 0.40                                                                              | 0.58                                                                              |                                                                                   | 0.32                                                                              | 0.70                                                                              | 0.22                                                                               | 0.23                                                                                | 0.23                                                                                |                                                                                     | 0.55                                                                                | 0.45                                                                                |
| Control Delay           |                                                                                   | 17.5                                                                              | 21.0                                                                              |                                                                                   | 12.6                                                                              | 24.7                                                                              | 4.1                                                                                | 58.6                                                                                | 17.6                                                                                |                                                                                     | 62.4                                                                                | 12.4                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 17.5                                                                              | 21.0                                                                              |                                                                                   | 12.6                                                                              | 24.7                                                                              | 4.1                                                                                | 58.6                                                                                | 17.6                                                                                |                                                                                     | 62.4                                                                                | 12.4                                                                                |
| LOS                     |                                                                                   | B                                                                                 | C                                                                                 |                                                                                   | B                                                                                 | C                                                                                 | A                                                                                  | E                                                                                   | B                                                                                   |                                                                                     | E                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 20.8                                                                              |                                                                                   |                                                                                   | 21.6                                                                              |                                                                                    |                                                                                     | 32.6                                                                                |                                                                                     |                                                                                     | 39.9                                                                                |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                    |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | D                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 5.9                                                                               | 87.7                                                                              |                                                                                   | 6.4                                                                               | 119.5                                                                             | 1.6                                                                                | 5.8                                                                                 | 0.5                                                                                 |                                                                                     | 20.9                                                                                | 0.2                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 19.4                                                                              | 150.6                                                                             |                                                                                   | 17.6                                                                              | #220.4                                                                            | 16.2                                                                               | 13.9                                                                                | 9.9                                                                                 |                                                                                     | 31.0                                                                                | 16.3                                                                                |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                   | 126.7                                                                             |                                                                                    |                                                                                     | 265.2                                                                               |                                                                                     |                                                                                     | 209.8                                                                               |
| Turn Bay Length (m)     |                                                                                   | 80.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 105.0                                                                              | 55.0                                                                                |                                                                                     |                                                                                     | 35.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 252                                                                               | 2002                                                                              |                                                                                   | 312                                                                               | 2033                                                                              | 951                                                                                | 232                                                                                 | 341                                                                                 |                                                                                     | 567                                                                                 | 423                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.33                                                                              | 0.58                                                                              |                                                                                   | 0.29                                                                              | 0.70                                                                              | 0.22                                                                               | 0.11                                                                                | 0.13                                                                                |                                                                                     | 0.31                                                                                | 0.34                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 23.3

Intersection LOS: C

Intersection Capacity Utilization 83.4%

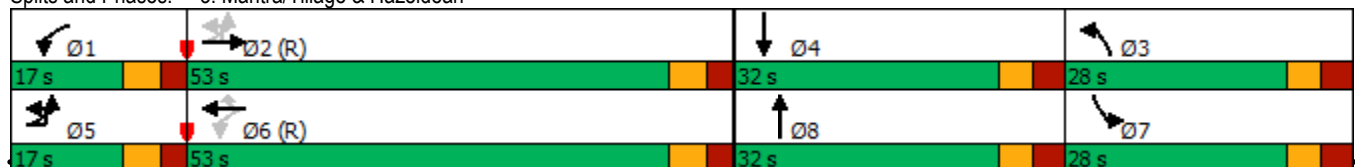
ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Mantra/Tillage & Hazeldean





| Lane Group              | SBR |
|-------------------------|-----|
| Minimum Initial (s)     |     |
| Minimum Split (s)       |     |
| Total Split (s)         |     |
| Total Split (%)         |     |
| Maximum Green (s)       |     |
| Yellow Time (s)         |     |
| All-Red Time (s)        |     |
| Lost Time Adjust (s)    |     |
| Total Lost Time (s)     |     |
| Lead/Lag                |     |
| Lead-Lag Optimize?      |     |
| Vehicle Extension (s)   |     |
| Recall Mode             |     |
| Walk Time (s)           |     |
| Flash Dont Walk (s)     |     |
| Pedestrian Calls (#/hr) |     |
| Act Effct Green (s)     |     |
| Actuated g/C Ratio      |     |
| v/c Ratio               |     |
| Control Delay           |     |
| Queue Delay             |     |
| Total Delay             |     |
| LOS                     |     |
| Approach Delay          |     |
| Approach LOS            |     |
| Queue Length 50th (m)   |     |
| Queue Length 95th (m)   |     |
| Internal Link Dist (m)  |     |
| Turn Bay Length (m)     |     |
| Base Capacity (vph)     |     |
| Starvation Cap Reductn  |     |
| Spillback Cap Reductn   |     |
| Storage Cap Reductn     |     |
| Reduced v/c Ratio       |     |
| Intersection Summary    |     |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |   |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 451                                                                               | 811                                                                               | 274                                                                               | 14                                                                                | 312                                                                               | 1020                                                                                | 319                                                                                 | 312                                                                                 | 823                                                                                 | 215                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 2                                                                                 | 451                                                                               | 811                                                                               | 274                                                                               | 14                                                                                | 312                                                                               | 1020                                                                                | 319                                                                                 | 312                                                                                 | 823                                                                                 | 215                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                     | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.95                                                                              |                                                                                   | 0.99                                                                              |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 3364                                                                              | 3537                                                                              | 1551                                                                              | 0                                                                                 | 3398                                                                              | 3537                                                                                | 1551                                                                                | 3397                                                                                | 3468                                                                                | 1567                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 3359                                                                              | 3537                                                                              | 1481                                                                              | 0                                                                                 | 3366                                                                              | 3537                                                                                | 1521                                                                                | 3387                                                                                | 3468                                                                                | 1527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 232                                                                               |                                                                                   |                                                                                   |                                                                                     | 172                                                                                 |                                                                                     |                                                                                     | 150                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                  |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 644.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                               |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 38.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                 |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 24                                                                                |                                                                                   | 24                                                                                |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                  | 3%                                                                                  | 2%                                                                                  | 3%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 451                                                                               | 811                                                                               | 274                                                                               | 14                                                                                | 312                                                                               | 1020                                                                                | 319                                                                                 | 312                                                                                 | 823                                                                                 | 215                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 453                                                                               | 811                                                                               | 274                                                                               | 0                                                                                 | 326                                                                               | 1020                                                                                | 319                                                                                 | 312                                                                                 | 823                                                                                 | 215                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                                |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                   |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                   | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                            |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                 | SBL                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations        |  |  |  |
| Traffic Volume (vph)       | 327                                                                               | 948                                                                               | 447                                                                               |
| Future Volume (vph)        | 327                                                                               | 948                                                                               | 447                                                                               |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)         | 155.0                                                                             |                                                                                   | 200.0                                                                             |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              |
| Ped Bike Factor            | 0.99                                                                              |                                                                                   | 0.98                                                                              |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)          | 3431                                                                              | 3502                                                                              | 1567                                                                              |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)          | 3408                                                                              | 3502                                                                              | 1537                                                                              |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 261                                                                               |
| Link Speed (k/h)           |                                                                                   | 70                                                                                |                                                                                   |
| Link Distance (m)          |                                                                                   | 316.2                                                                             |                                                                                   |
| Travel Time (s)            |                                                                                   | 16.3                                                                              |                                                                                   |
| Confl. Peds. (#/hr)        | 10                                                                                |                                                                                   | 5                                                                                 |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 2%                                                                                |
| Adj. Flow (vph)            | 327                                                                               | 948                                                                               | 447                                                                               |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)      | 328                                                                               | 948                                                                               | 447                                                                               |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)            |                                                                                   | 10.0                                                                              |                                                                                   |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 | 1                                                                                 |
| Detector Template          | Left                                                                              | Thru                                                                              | Right                                                                             |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              |
| Protected Phases           | 1                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   | 6                                                                                 |
| Detector Phase             | 1                                                                                 | 6                                                                                 | 6                                                                                 |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                                | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 23.0                                                                              | 23.0                                                                              | 42.0                                                                              | 42.0                                                                              | 23.0                                                                              | 23.0                                                                              | 42.0                                                                                | 42.0                                                                                | 18.0                                                                                | 37.0                                                                                | 37.0                                                                                | 18.0                                                                                |
| Total Split (%)         | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                             | 35.0%                                                                             | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                               | 35.0%                                                                               | 15.0%                                                                               | 30.8%                                                                               | 30.8%                                                                               | 15.0%                                                                               |
| Maximum Green (s)       | 16.5                                                                              | 16.5                                                                              | 35.5                                                                              | 35.5                                                                              | 16.5                                                                              | 16.5                                                                              | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                | 11.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                 | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                                | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                                | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 24                                                                                | 24                                                                                |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 16.5                                                                              | 36.7                                                                              | 36.7                                                                              |                                                                                   | 15.3                                                                              | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.31                                                                              | 0.31                                                                              |                                                                                   | 0.13                                                                              | 0.30                                                                                | 0.30                                                                                | 0.10                                                                                | 0.25                                                                                | 0.25                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.98                                                                              | 0.75                                                                              | 0.45                                                                              |                                                                                   | 0.75                                                                              | 0.98                                                                                | 0.56                                                                                | 0.96                                                                                | 0.93                                                                                | 0.43                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 89.1                                                                              | 43.1                                                                              | 9.3                                                                               |                                                                                   | 50.8                                                                              | 71.2                                                                                | 30.9                                                                                | 100.9                                                                               | 54.9                                                                                | 9.2                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 89.1                                                                              | 43.1                                                                              | 9.3                                                                               |                                                                                   | 50.8                                                                              | 71.2                                                                                | 30.9                                                                                | 100.9                                                                               | 54.9                                                                                | 9.4                                                                                 |                                                                                     |
| LOS                     |                                                                                   | F                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | E                                                                                   | C                                                                                   | F                                                                                   | D                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 50.6                                                                              |                                                                                   |                                                                                   |                                                                                   | 59.5                                                                                |                                                                                     |                                                                                     | 58.3                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | E                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 51.1                                                                              | 84.5                                                                              | 6.6                                                                               |                                                                                   | 35.4                                                                              | 117.7                                                                               | 38.7                                                                                | 29.4                                                                                | 92.7                                                                                | 14.1                                                                                |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | #81.3                                                                             | 106.0                                                                             | 27.0                                                                              |                                                                                   | 49.0                                                                              | #160.7                                                                              | 74.1                                                                                | #62.5                                                                               | #127.2                                                                              | 7.6                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 620.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                               |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                     | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 462                                                                               | 1080                                                                              | 613                                                                               |                                                                                   | 467                                                                               | 1046                                                                                | 571                                                                                 | 325                                                                                 | 881                                                                                 | 499                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 35                                                                                  |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.98                                                                              | 0.75                                                                              | 0.45                                                                              |                                                                                   | 0.70                                                                              | 0.98                                                                                | 0.56                                                                                | 0.96                                                                                | 0.93                                                                                | 0.46                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.07

Intersection Signal Delay: 63.9

Intersection LOS: E

Intersection Capacity Utilization 104.2%

ICU Level of Service G

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

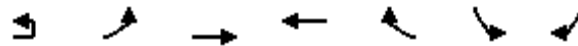
Splits and Phases: 4: Terry Fox & Hazeldean

|                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |
| Ø1                                                                                  | Ø2 (R)                                                                              | Ø3                                                                                  | Ø4                                                                                    |
| 18 s                                                                                | 37 s                                                                                | 23 s                                                                                | 42 s                                                                                  |
|  |  |  |  |
| Ø5                                                                                  | Ø6 (R)                                                                              | Ø7                                                                                  | Ø8                                                                                    |
| 18 s                                                                                | 37 s                                                                                | 23 s                                                                                | 42 s                                                                                  |

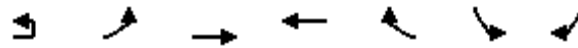




| Lane Group              | SBL   | SBT    | SBR   |
|-------------------------|-------|--------|-------|
| Switch Phase            |       |        |       |
| Minimum Initial (s)     | 5.0   | 10.0   | 10.0  |
| Minimum Split (s)       | 11.5  | 35.5   | 35.5  |
| Total Split (s)         | 18.0  | 37.0   | 37.0  |
| Total Split (%)         | 15.0% | 30.8%  | 30.8% |
| Maximum Green (s)       | 11.5  | 30.5   | 30.5  |
| Yellow Time (s)         | 4.2   | 4.2    | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3    | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0    | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5    | 6.5   |
| Lead/Lag                | Lead  | Lag    | Lag   |
| Lead-Lag Optimize?      |       |        |       |
| Vehicle Extension (s)   | 3.0   | 3.0    | 3.0   |
| Recall Mode             | None  | C-Max  | C-Max |
| Walk Time (s)           |       | 7.0    | 7.0   |
| Flash Dont Walk (s)     |       | 22.0   | 22.0  |
| Pedestrian Calls (#/hr) |       | 10     | 10    |
| Act Effct Green (s)     | 11.5  | 30.5   | 30.5  |
| Actuated g/C Ratio      | 0.10  | 0.25   | 0.25  |
| v/c Ratio               | 1.00  | 1.07   | 0.76  |
| Control Delay           | 106.8 | 91.1   | 28.5  |
| Queue Delay             | 34.1  | 0.0    | 0.0   |
| Total Delay             | 140.9 | 91.1   | 28.5  |
| LOS                     | F     | F      | C     |
| Approach Delay          |       | 84.3   |       |
| Approach LOS            |       | F      |       |
| Queue Length 50th (m)   | 39.2  | ~115.3 | 23.4  |
| Queue Length 95th (m)   | #66.7 | #153.4 | 83.8  |
| Internal Link Dist (m)  |       | 292.2  |       |
| Turn Bay Length (m)     | 155.0 |        | 200.0 |
| Base Capacity (vph)     | 328   | 890    | 585   |
| Starvation Cap Reductn  | 0     | 0      | 0     |
| Spillback Cap Reductn   | 61    | 0      | 0     |
| Storage Cap Reductn     | 0     | 0      | 0     |
| Reduced v/c Ratio       | 1.23  | 1.07   | 0.76  |
| Intersection Summary    |       |        |       |



| Lane Group                 | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 4     | 78    | 1300  | 1750  | 54    | 99    | 97    |
| Future Volume (vph)        | 4     | 78    | 1300  | 1750  | 54    | 99    | 97    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 35.0  |       |       | 0.0   | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       |       | 0     | 1     | 1     |
| Taper Length (m)           |       | 40.0  |       |       |       | 40.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  |
| Ped Bike Factor            |       |       |       | 1.00  |       | 0.99  | 0.97  |
| Frt                        |       |       |       | 0.996 |       |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1752  | 3537  | 3516  | 0     | 1768  | 1582  |
| Flt Permitted              |       | 0.089 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 164   | 3537  | 3516  | 0     | 1746  | 1533  |
| Right Turn on Red          |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 5     |       |       | 27    |
| Link Speed (k/h)           |       |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 157.6 | 314.8 |       | 401.6 |       |
| Travel Time (s)            |       |       | 9.5   | 18.9  |       | 28.9  |       |
| Confl. Peds. (#/hr)        |       | 17    |       |       | 17    | 10    | 15    |
| Peak Hour Factor           | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 1%    | 2%    | 1%    | 1%    | 1%    | 1%    | 1%    |
| Adj. Flow (vph)            | 4     | 78    | 1300  | 1750  | 54    | 99    | 97    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 82    | 1300  | 1804  | 0     | 99    | 97    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | L NA  | Left  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 8.0   | 4.0   |       | 4.0   |       |
| Link Offset(m)             |       |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 2     |       | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Thru  |       | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 10.0  |       | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 0.6   |       | 2.0   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex | CI+Ex | CI+Ex |       | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       |       | CI+Ex | CI+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | NA    |       | Perm  | Perm  |
| Protected Phases           |       |       | 2     | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       |       |       | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     |       | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |



| Lane Group              | EBU   | EBL   | EBT    | WBT   | WBR | SBL   | SBR   |
|-------------------------|-------|-------|--------|-------|-----|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  | 10.0   | 10.0  |     | 10.0  | 10.0  |
| Minimum Split (s)       | 16.2  | 16.2  | 16.2   | 31.2  |     | 34.1  | 34.1  |
| Total Split (s)         | 86.0  | 86.0  | 86.0   | 86.0  |     | 34.0  | 34.0  |
| Total Split (%)         | 71.7% | 71.7% | 71.7%  | 71.7% |     | 28.3% | 28.3% |
| Maximum Green (s)       | 79.8  | 79.8  | 79.8   | 79.8  |     | 27.9  | 27.9  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7    | 3.7   |     | 3.3   | 3.3   |
| All-Red Time (s)        | 2.5   | 2.5   | 2.5    | 2.5   |     | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0    | 0.0   |     | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.2   | 6.2    | 6.2   |     | 6.1   | 6.1   |
| Lead/Lag                |       |       |        |       |     |       |       |
| Lead-Lag Optimize?      |       |       |        |       |     |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0    | 3.0   |     | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max | C-Max  | C-Max |     | None  | None  |
| Walk Time (s)           |       |       |        | 7.0   |     | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |       |        | 18.0  |     | 21.0  | 21.0  |
| Pedestrian Calls (#/hr) |       |       |        | 17    |     | 15    | 15    |
| Act Effct Green (s)     |       | 90.1  | 90.1   | 90.1  |     | 17.6  | 17.6  |
| Actuated g/C Ratio      |       | 0.75  | 0.75   | 0.75  |     | 0.15  | 0.15  |
| v/c Ratio               |       | 0.67  | 0.49   | 0.68  |     | 0.39  | 0.39  |
| Control Delay           |       | 46.4  | 15.4   | 10.9  |     | 45.5  | 32.6  |
| Queue Delay             |       | 0.0   | 2.2    | 0.0   |     | 0.0   | 0.0   |
| Total Delay             |       | 46.4  | 17.6   | 10.9  |     | 45.5  | 32.6  |
| LOS                     |       | D     | B      | B     |     | D     | C     |
| Approach Delay          |       |       | 19.4   | 10.9  |     | 39.1  |       |
| Approach LOS            |       |       | B      | B     |     | D     |       |
| Queue Length 50th (m)   |       | 13.1  | 100.1  | 69.5  |     | 21.3  | 15.1  |
| Queue Length 95th (m)   |       | m23.5 | m161.6 | 156.0 |     | m28.4 | m21.8 |
| Internal Link Dist (m)  |       |       | 133.6  | 290.8 |     | 377.6 |       |
| Turn Bay Length (m)     |       | 35.0  |        |       |     | 30.0  |       |
| Base Capacity (vph)     |       | 123   | 2655   | 2641  |     | 405   | 377   |
| Starvation Cap Reductn  |       | 0     | 1168   | 0     |     | 0     | 0     |
| Spillback Cap Reductn   |       | 0     | 0      | 0     |     | 0     | 0     |
| Storage Cap Reductn     |       | 0     | 0      | 0     |     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.67  | 0.87   | 0.68  |     | 0.24  | 0.26  |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 10 (8%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 16.0

Intersection LOS: B

Intersection Capacity Utilization 90.9%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Hazeldean & Edgewater



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                   | 1374                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1706                                                                                |
| Future Volume (vph)        | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                   | 1374                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1706                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.98                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                     | 0.993                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1669                                                                              | 1554                                                                              | 0                                                                                 | 1768                                                                              | 1560                                                                              | 0                                                                                 | 1768                                                                                | 3474                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3537                                                                                |
| Flt Permitted              | 0.393                                                                             |                                                                                   |                                                                                   | 0.752                                                                             |                                                                                   |                                                                                   | 0.105                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.108                                                                               |                                                                                     |
| Satd. Flow (perm)          | 688                                                                               | 1554                                                                              | 0                                                                                 | 1391                                                                              | 1560                                                                              | 0                                                                                 | 195                                                                                 | 3474                                                                                | 0                                                                                   | 0                                                                                   | 197                                                                                 | 3537                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 126                                                                               |                                                                                   |                                                                                   | 120                                                                               |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                     | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                     | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 7%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 3%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                   | 1374                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1706                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 8                                                                                 | 0                                                                                 | 41                                                                                | 189                                                                               | 0                                                                                 | 2                                                                                   | 1437                                                                                | 0                                                                                   | 0                                                                                   | 165                                                                                 | 1706                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 29    |
| Future Volume (vph)        | 29    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1551  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1504  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 92    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 3%    |
| Adj. Flow (vph)            | 29    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 29    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 5.0                                                                                | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 5.0                                                                                 | 10.0                                                                                |
| Minimum Split (s)       | 36.5                                                                              | 36.5                                                                              |                                                                                   | 36.5                                                                              | 36.5                                                                              |                                                                                   | 11.6                                                                               | 34.5                                                                                |                                                                                     | 11.6                                                                                | 11.6                                                                                | 34.5                                                                                |
| Total Split (s)         | 37.0                                                                              | 37.0                                                                              |                                                                                   | 37.0                                                                              | 37.0                                                                              |                                                                                   | 14.0                                                                               | 69.0                                                                                |                                                                                     | 14.0                                                                                | 14.0                                                                                | 69.0                                                                                |
| Total Split (%)         | 30.8%                                                                             | 30.8%                                                                             |                                                                                   | 30.8%                                                                             | 30.8%                                                                             |                                                                                   | 11.7%                                                                              | 57.5%                                                                               |                                                                                     | 11.7%                                                                               | 11.7%                                                                               | 57.5%                                                                               |
| Maximum Green (s)       | 30.5                                                                              | 30.5                                                                              |                                                                                   | 30.5                                                                              | 30.5                                                                              |                                                                                   | 7.4                                                                                | 62.5                                                                                |                                                                                     | 7.4                                                                                 | 7.4                                                                                 | 62.5                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 3.2                                                                               | 3.2                                                                               |                                                                                   | 3.2                                                                               | 3.2                                                                               |                                                                                   | 2.4                                                                                | 2.3                                                                                 |                                                                                     | 2.4                                                                                 | 2.4                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.6                                                                                | 6.5                                                                                 |                                                                                     |                                                                                     | 6.6                                                                                 | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lead                                                                                | Lag                                                                                 |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               |                                                                                     | None                                                                                | None                                                                                | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                    | 7.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   |                                                                                    | 21.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 21.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                    | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     | 5                                                                                   |
| Act Effct Green (s)     | 15.1                                                                              | 15.1                                                                              |                                                                                   | 15.1                                                                              | 15.1                                                                              |                                                                                   | 79.4                                                                               | 74.0                                                                                |                                                                                     |                                                                                     | 90.9                                                                                | 89.4                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.66                                                                               | 0.62                                                                                |                                                                                     |                                                                                     | 0.76                                                                                | 0.74                                                                                |
| v/c Ratio               | 0.17                                                                              | 0.03                                                                              |                                                                                   | 0.24                                                                              | 0.63                                                                              |                                                                                   | 0.01                                                                               | 0.67                                                                                |                                                                                     |                                                                                     | 0.56                                                                                | 0.65                                                                                |
| Control Delay           | 47.1                                                                              | 0.1                                                                               |                                                                                   | 41.0                                                                              | 24.1                                                                              |                                                                                   | 5.0                                                                                | 9.4                                                                                 |                                                                                     |                                                                                     | 17.1                                                                                | 11.7                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 47.1                                                                              | 0.1                                                                               |                                                                                   | 41.0                                                                              | 24.1                                                                              |                                                                                   | 5.0                                                                                | 9.4                                                                                 |                                                                                     |                                                                                     | 17.1                                                                                | 11.7                                                                                |
| LOS                     | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 30.8                                                                              |                                                                                   |                                                                                   | 27.1                                                                              |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 12.0                                                                                |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 3.1                                                                               | 0.0                                                                               |                                                                                   | 8.7                                                                               | 17.3                                                                              |                                                                                   | 0.0                                                                                | 46.4                                                                                |                                                                                     |                                                                                     | 6.5                                                                                 | 61.2                                                                                |
| Queue Length 95th (m)   | 7.9                                                                               | 0.0                                                                               |                                                                                   | m12.3                                                                             | m30.4                                                                             |                                                                                   | m0.2                                                                               | 32.1                                                                                |                                                                                     |                                                                                     | #40.0                                                                               | 200.2                                                                               |
| Internal Link Dist (m)  |                                                                                   | 193.1                                                                             |                                                                                   |                                                                                   | 258.1                                                                             |                                                                                   |                                                                                    | 229.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 336.0                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 65.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |                                                                                     |
| Base Capacity (vph)     | 174                                                                               | 488                                                                               |                                                                                   | 353                                                                               | 486                                                                               |                                                                                   | 229                                                                                | 2144                                                                                |                                                                                     |                                                                                     | 293                                                                                 | 2636                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.09                                                                              | 0.02                                                                              |                                                                                   | 0.12                                                                              | 0.39                                                                              |                                                                                   | 0.01                                                                               | 0.67                                                                                |                                                                                     |                                                                                     | 0.56                                                                                | 0.65                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 46 (38%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 12.1

Intersection LOS: B

Intersection Capacity Utilization 85.3%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 69.0  |
| Total Split (%)         | 57.5% |
| Maximum Green (s)       | 62.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                | Lag   |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 89.4  |
| Actuated g/C Ratio      | 0.74  |
| v/c Ratio               | 0.03  |
| Control Delay           | 0.0   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.0   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.0   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1144  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.03  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBU                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |  |                                                                                     |                                                                                     |  |
| Traffic Volume (vph)       | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1256                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Future Volume (vph)        | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1256                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 35.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 |                                                                                    | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (m)           | 25.0                                                                              |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                    | 10.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                               | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor            | 0.99                                                                              | 0.98                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                    |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                    |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 1768                                                                              | 1552                                                                              | 0                                                                                 | 1488                                                                              | 1552                                                                              | 0                                                                                 | 0                                                                                  | 1768                                                                                | 3457                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                |
| Flt Permitted              | 0.756                                                                             |                                                                                   |                                                                                   | 0.740                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.124                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.196                                                                               |
| Satd. Flow (perm)          | 1398                                                                              | 1552                                                                              | 0                                                                                 | 1152                                                                              | 1552                                                                              | 0                                                                                 | 0                                                                                  | 231                                                                                 | 3457                                                                                | 0                                                                                   | 0                                                                                   | 365                                                                                 |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 122                                                                               |                                                                                   |                                                                                   | 147                                                                               |                                                                                   |                                                                                    |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   | 207.5                                                                             |                                                                                   |                                                                                   | 88.7                                                                              |                                                                                   |                                                                                    |                                                                                     | 316.2                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   | 14.9                                                                              |                                                                                   |                                                                                   | 10.6                                                                              |                                                                                   |                                                                                    |                                                                                     | 16.3                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 20%                                                                               | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 3%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1256                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 26                                                                                | 0                                                                                 | 5                                                                                 | 3                                                                                 | 0                                                                                 | 0                                                                                  | 39                                                                                  | 1280                                                                                | 0                                                                                   | 0                                                                                   | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                               | Left                                                                                | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 12.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                 | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |





| Lane Group                 | SBT   | SBR  |
|----------------------------|-------|------|
| Lane Configurations        | ↑↑    |      |
| Traffic Volume (vph)       | 1545  | 1    |
| Future Volume (vph)        | 1545  | 1    |
| Ideal Flow (vphpl)         | 1800  | 1800 |
| Storage Length (m)         |       | 0.0  |
| Storage Lanes              |       | 0    |
| Taper Length (m)           |       |      |
| Lane Util. Factor          | 0.95  | 0.95 |
| Ped Bike Factor            | 1.00  |      |
| Frt                        |       |      |
| Flt Protected              |       |      |
| Satd. Flow (prot)          | 3537  | 0    |
| Flt Permitted              |       |      |
| Satd. Flow (perm)          | 3537  | 0    |
| Right Turn on Red          |       | Yes  |
| Satd. Flow (RTOR)          |       |      |
| Link Speed (k/h)           | 70    |      |
| Link Distance (m)          | 253.3 |      |
| Travel Time (s)            | 13.0  |      |
| Confl. Peds. (#/hr)        |       | 5    |
| Peak Hour Factor           | 1.00  | 1.00 |
| Heavy Vehicles (%)         | 1%    | 1%   |
| Adj. Flow (vph)            | 1545  | 1    |
| Shared Lane Traffic (%)    |       |      |
| Lane Group Flow (vph)      | 1546  | 0    |
| Enter Blocked Intersection | No    | No   |
| Lane Alignment             | Left  | R NA |
| Median Width(m)            | 12.0  |      |
| Link Offset(m)             | 0.0   |      |
| Crosswalk Width(m)         | 5.0   |      |
| Two way Left Turn Lane     |       |      |
| Headway Factor             | 1.01  | 1.01 |
| Turning Speed (k/h)        |       | 14   |
| Number of Detectors        | 2     |      |
| Detector Template          | Thru  |      |
| Leading Detector (m)       | 10.0  |      |
| Trailing Detector (m)      | 0.0   |      |
| Detector 1 Position(m)     | 0.0   |      |
| Detector 1 Size(m)         | 0.6   |      |
| Detector 1 Type            | CI+Ex |      |
| Detector 1 Channel         |       |      |
| Detector 1 Extend (s)      | 0.0   |      |
| Detector 1 Queue (s)       | 0.0   |      |
| Detector 1 Delay (s)       | 0.0   |      |
| Detector 2 Position(m)     | 9.4   |      |
| Detector 2 Size(m)         | 0.6   |      |
| Detector 2 Type            | CI+Ex |      |
| Detector 2 Channel         |       |      |
| Detector 2 Extend (s)      | 0.0   |      |
| Turn Type                  | NA    |      |
| Protected Phases           | 6     |      |
| Permitted Phases           |       |      |
| Detector Phase             | 6     |      |
| Switch Phase               |       |      |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBU                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 5.0                                                                                | 5.0                                                                                 | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.2                                                                              | 32.2                                                                              |                                                                                   | 11.5                                                                               | 11.5                                                                                | 32.5                                                                                |                                                                                     | 11.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                | 72.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                |
| Total Split (%)         | 27.5%                                                                             | 27.5%                                                                             |                                                                                   | 27.5%                                                                             | 27.5%                                                                             |                                                                                   | 12.5%                                                                              | 12.5%                                                                               | 60.0%                                                                               |                                                                                     | 12.5%                                                                               | 12.5%                                                                               |
| Maximum Green (s)       | 26.8                                                                              | 26.8                                                                              |                                                                                   | 26.8                                                                              | 26.8                                                                              |                                                                                   | 8.5                                                                                | 8.5                                                                                 | 65.5                                                                                |                                                                                     | 8.5                                                                                 | 8.5                                                                                 |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Total Lost Time (s)     | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.2                                                                               | 6.2                                                                               |                                                                                   |                                                                                    | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |                                                                                     | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lead                                                                                | Lag                                                                                 |                                                                                     | Lead                                                                                | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | None                                                                                | C-Max                                                                               |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 7.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Flash Dont Walk (s)     | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                              | 19.0                                                                              |                                                                                   |                                                                                    |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                    |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Act Effct Green (s)     | 13.2                                                                              | 13.2                                                                              |                                                                                   | 13.2                                                                              | 13.2                                                                              |                                                                                   |                                                                                    | 99.6                                                                                | 100.7                                                                               |                                                                                     |                                                                                     | 96.1                                                                                |
| Actuated g/C Ratio      | 0.11                                                                              | 0.11                                                                              |                                                                                   | 0.11                                                                              | 0.11                                                                              |                                                                                   |                                                                                    | 0.83                                                                                | 0.84                                                                                |                                                                                     |                                                                                     | 0.80                                                                                |
| v/c Ratio               | 0.02                                                                              | 0.09                                                                              |                                                                                   | 0.04                                                                              | 0.01                                                                              |                                                                                   |                                                                                    | 0.14                                                                                | 0.44                                                                                |                                                                                     |                                                                                     | 0.01                                                                                |
| Control Delay           | 43.0                                                                              | 0.7                                                                               |                                                                                   | 43.8                                                                              | 0.0                                                                               |                                                                                   |                                                                                    | 2.7                                                                                 | 2.4                                                                                 |                                                                                     |                                                                                     | 5.2                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Total Delay             | 43.0                                                                              | 0.7                                                                               |                                                                                   | 43.8                                                                              | 0.0                                                                               |                                                                                   |                                                                                    | 2.7                                                                                 | 2.4                                                                                 |                                                                                     |                                                                                     | 5.2                                                                                 |
| LOS                     | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | A                                                                                 |                                                                                   |                                                                                    | A                                                                                   | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |
| Approach Delay          |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 27.4                                                                              |                                                                                   |                                                                                    |                                                                                     | 2.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 50th (m)   | 0.6                                                                               | 0.0                                                                               |                                                                                   | 1.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 1.0                                                                                 | 17.8                                                                                |                                                                                     |                                                                                     | 0.1                                                                                 |
| Queue Length 95th (m)   | 2.9                                                                               | 0.0                                                                               |                                                                                   | 4.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | m1.7                                                                                | m26.3                                                                               |                                                                                     |                                                                                     | m0.4                                                                                |
| Internal Link Dist (m)  |                                                                                   | 183.5                                                                             |                                                                                   |                                                                                   | 64.7                                                                              |                                                                                   |                                                                                    |                                                                                     | 292.2                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Turn Bay Length (m)     | 35.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |
| Base Capacity (vph)     | 312                                                                               | 441                                                                               |                                                                                   | 257                                                                               | 460                                                                               |                                                                                   |                                                                                    | 301                                                                                 | 2902                                                                                |                                                                                     |                                                                                     | 397                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       | 0.01                                                                              | 0.06                                                                              |                                                                                   | 0.02                                                                              | 0.01                                                                              |                                                                                   |                                                                                    | 0.13                                                                                | 0.44                                                                                |                                                                                     |                                                                                     | 0.01                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 40 (33%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.55

Intersection Signal Delay: 4.3

Intersection LOS: A

Intersection Capacity Utilization 66.1%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Terry Fox & Tony Graham Rec



|                         | ↓     | ↙   |
|-------------------------|-------|-----|
| Lane Group              | SBT   | SBR |
| Minimum Initial (s)     | 10.0  |     |
| Minimum Split (s)       | 32.5  |     |
| Total Split (s)         | 72.0  |     |
| Total Split (%)         | 60.0% |     |
| Maximum Green (s)       | 65.5  |     |
| Yellow Time (s)         | 4.2   |     |
| All-Red Time (s)        | 2.3   |     |
| Lost Time Adjust (s)    | 0.0   |     |
| Total Lost Time (s)     | 6.5   |     |
| Lead/Lag                | Lag   |     |
| Lead-Lag Optimize?      |       |     |
| Vehicle Extension (s)   | 3.0   |     |
| Recall Mode             | C-Max |     |
| Walk Time (s)           | 7.0   |     |
| Flash Dont Walk (s)     | 19.0  |     |
| Pedestrian Calls (#/hr) | 5     |     |
| Act Effct Green (s)     | 95.4  |     |
| Actuated g/C Ratio      | 0.80  |     |
| v/c Ratio               | 0.55  |     |
| Control Delay           | 5.8   |     |
| Queue Delay             | 0.0   |     |
| Total Delay             | 5.8   |     |
| LOS                     | A     |     |
| Approach Delay          | 5.8   |     |
| Approach LOS            | A     |     |
| Queue Length 50th (m)   | 29.3  |     |
| Queue Length 95th (m)   | 55.8  |     |
| Internal Link Dist (m)  | 229.3 |     |
| Turn Bay Length (m)     |       |     |
| Base Capacity (vph)     | 2810  |     |
| Starvation Cap Reductn  | 0     |     |
| Spillback Cap Reductn   | 0     |     |
| Storage Cap Reductn     | 0     |     |
| Reduced v/c Ratio       | 0.55  |     |
| Intersection Summary    |       |     |

8: Terry Fox & Sobey's  
PM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 1027                                                                                | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1405                                                                                |
| Future Volume (vph)        | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 1027                                                                                | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1405                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 10.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 30.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.91                                                                                | 0.91                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.917                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.990                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.992                                                                               |
| Flt Protected              |                                                                                   | 0.984                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1658                                                                              | 0                                                                                 | 0                                                                                 | 1776                                                                              | 1582                                                                              | 1768                                                                               | 5019                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3499                                                                                |
| Flt Permitted              |                                                                                   | 0.864                                                                             |                                                                                   |                                                                                   | 0.602                                                                             |                                                                                   | 0.137                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.237                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1453                                                                              | 0                                                                                 | 0                                                                                 | 1114                                                                              | 1552                                                                              | 255                                                                                | 5019                                                                                | 0                                                                                   | 0                                                                                   | 440                                                                                 | 3499                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 103                                                                               |                                                                                    | 20                                                                                  |                                                                                     |                                                                                     |                                                                                     | 10                                                                                  |
| Link Speed (k/h)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 132.0                                                                             |                                                                                   |                                                                                   | 152.6                                                                             |                                                                                   |                                                                                    | 140.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 142.7                                                                               |
| Travel Time (s)            |                                                                                   | 15.8                                                                              |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                    | 7.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.3                                                                                 |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 10                                                                                 |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 1027                                                                                | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1405                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 117                                                                               | 0                                                                                 | 0                                                                                 | 80                                                                                | 103                                                                               | 26                                                                                 | 1103                                                                                | 0                                                                                   | 0                                                                                   | 117                                                                                 | 1487                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |

|                            |      |    |
|----------------------------|------|----|
| Lane Group                 | SBR  | Ø9 |
| Lane Configurations        |      |    |
| Traffic Volume (vph)       | 82   |    |
| Future Volume (vph)        | 82   |    |
| Ideal Flow (vphpl)         | 1800 |    |
| Storage Length (m)         | 0.0  |    |
| Storage Lanes              | 0    |    |
| Taper Length (m)           |      |    |
| Lane Util. Factor          | 0.95 |    |
| Ped Bike Factor            |      |    |
| Frt                        |      |    |
| Flt Protected              |      |    |
| Satd. Flow (prot)          | 0    |    |
| Flt Permitted              |      |    |
| Satd. Flow (perm)          | 0    |    |
| Right Turn on Red          | Yes  |    |
| Satd. Flow (RTOR)          |      |    |
| Link Speed (k/h)           |      |    |
| Link Distance (m)          |      |    |
| Travel Time (s)            |      |    |
| Confl. Peds. (#/hr)        | 10   |    |
| Confl. Bikes (#/hr)        | 1    |    |
| Peak Hour Factor           | 1.00 |    |
| Heavy Vehicles (%)         | 1%   |    |
| Adj. Flow (vph)            | 82   |    |
| Shared Lane Traffic (%)    |      |    |
| Lane Group Flow (vph)      | 0    |    |
| Enter Blocked Intersection | No   |    |
| Lane Alignment             | R NA |    |
| Median Width(m)            |      |    |
| Link Offset(m)             |      |    |
| Crosswalk Width(m)         |      |    |
| Two way Left Turn Lane     |      |    |
| Headway Factor             | 1.01 |    |
| Turning Speed (k/h)        | 14   |    |
| Number of Detectors        |      |    |
| Detector Template          |      |    |
| Leading Detector (m)       |      |    |
| Trailing Detector (m)      |      |    |
| Detector 1 Position(m)     |      |    |
| Detector 1 Size(m)         |      |    |
| Detector 1 Type            |      |    |
| Detector 1 Channel         |      |    |
| Detector 1 Extend (s)      |      |    |
| Detector 1 Queue (s)       |      |    |
| Detector 1 Delay (s)       |      |    |
| Detector 2 Position(m)     |      |    |
| Detector 2 Size(m)         |      |    |
| Detector 2 Type            |      |    |
| Detector 2 Channel         |      |    |
| Detector 2 Extend (s)      |      |    |
| Turn Type                  |      |    |
| Protected Phases           | 9    |    |
| Permitted Phases           |      |    |
| Detector Phase             |      |    |

8: Terry Fox & Sobey's  
PM Peak Hour

560 Hazeldean Road  
2031 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 26.0                                                                               | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                | 26.0                                                                                |
| Total Split (s)         | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 84.0                                                                               | 84.0                                                                                |                                                                                     | 84.0                                                                                | 84.0                                                                                | 84.0                                                                                |
| Total Split (%)         | 25.8%                                                                             | 25.8%                                                                             |                                                                                   | 25.8%                                                                             | 25.8%                                                                             | 25.8%                                                                             | 70.0%                                                                              | 70.0%                                                                               |                                                                                     | 70.0%                                                                               | 70.0%                                                                               | 70.0%                                                                               |
| Maximum Green (s)       | 24.0                                                                              | 24.0                                                                              |                                                                                   | 24.0                                                                              | 24.0                                                                              | 24.0                                                                              | 78.0                                                                               | 78.0                                                                                |                                                                                     | 78.0                                                                                | 78.0                                                                                | 78.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 1.8                                                                                | 1.8                                                                                 |                                                                                     | 1.8                                                                                 | 1.8                                                                                 | 1.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               | 6.0                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 6.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 17.0                                                                              | 17.0                                                                              |                                                                                   | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              | 13.0                                                                               | 13.0                                                                                |                                                                                     | 13.0                                                                                | 13.0                                                                                | 13.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  | 10                                                                                  |
| Act Effct Green (s)     |                                                                                   | 14.8                                                                              |                                                                                   |                                                                                   | 14.8                                                                              | 14.8                                                                              | 87.2                                                                               | 87.2                                                                                |                                                                                     |                                                                                     | 87.2                                                                                | 87.2                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.12                                                                              | 0.12                                                                              | 0.73                                                                               | 0.73                                                                                |                                                                                     |                                                                                     | 0.73                                                                                | 0.73                                                                                |
| v/c Ratio               |                                                                                   | 0.50                                                                              |                                                                                   |                                                                                   | 0.58                                                                              | 0.37                                                                              | 0.14                                                                               | 0.30                                                                                |                                                                                     |                                                                                     | 0.37                                                                                | 0.58                                                                                |
| Control Delay           |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 65.2                                                                              | 11.8                                                                              | 6.8                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 4.1                                                                                 | 3.5                                                                                 |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.3                                                                                 |
| Total Delay             |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 65.2                                                                              | 11.8                                                                              | 6.8                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 4.1                                                                                 | 3.8                                                                                 |
| LOS                     |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 | B                                                                                 | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 35.1                                                                              |                                                                                   |                                                                                    | 6.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 3.8                                                                                 |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   | 16.9                                                                              | 0.0                                                                               | 2.0                                                                                | 34.5                                                                                |                                                                                     |                                                                                     | 1.7                                                                                 | 11.6                                                                                |
| Queue Length 95th (m)   |                                                                                   | 26.0                                                                              |                                                                                   |                                                                                   | 29.2                                                                              | 13.2                                                                              | 5.9                                                                                | 39.3                                                                                |                                                                                     |                                                                                     | m3.7                                                                                | m21.0                                                                               |
| Internal Link Dist (m)  |                                                                                   | 108.0                                                                             |                                                                                   |                                                                                   | 128.6                                                                             |                                                                                   |                                                                                    | 116.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 118.7                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 338                                                                               |                                                                                   |                                                                                   | 222                                                                               | 392                                                                               | 185                                                                                | 3650                                                                                |                                                                                     |                                                                                     | 319                                                                                 | 2544                                                                                |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 422                                                                                 |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.35                                                                              |                                                                                   |                                                                                   | 0.36                                                                              | 0.26                                                                              | 0.14                                                                               | 0.30                                                                                |                                                                                     |                                                                                     | 0.37                                                                                | 0.70                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 22 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 7.6

Intersection LOS: A

Intersection Capacity Utilization 83.1%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Terry Fox & Sobey's



|                         |     |     |
|-------------------------|-----|-----|
| Lane Group              | SBR | Ø9  |
| Switch Phase            |     |     |
| Minimum Initial (s)     |     | 3.0 |
| Minimum Split (s)       |     | 5.0 |
| Total Split (s)         |     | 5.0 |
| Total Split (%)         |     | 4%  |
| Maximum Green (s)       |     | 3.0 |
| Yellow Time (s)         |     | 2.0 |
| All-Red Time (s)        |     | 0.0 |
| Lost Time Adjust (s)    |     |     |
| Total Lost Time (s)     |     |     |
| Lead/Lag                |     |     |
| Lead-Lag Optimize?      |     |     |
| Vehicle Extension (s)   |     | 3.0 |
| Recall Mode             |     | Max |
| Walk Time (s)           |     |     |
| Flash Dont Walk (s)     |     |     |
| Pedestrian Calls (#/hr) |     |     |
| Act Effct Green (s)     |     |     |
| Actuated g/C Ratio      |     |     |
| v/c Ratio               |     |     |
| Control Delay           |     |     |
| Queue Delay             |     |     |
| Total Delay             |     |     |
| LOS                     |     |     |
| Approach Delay          |     |     |
| Approach LOS            |     |     |
| Queue Length 50th (m)   |     |     |
| Queue Length 95th (m)   |     |     |
| Internal Link Dist (m)  |     |     |
| Turn Bay Length (m)     |     |     |
| Base Capacity (vph)     |     |     |
| Starvation Cap Reductn  |     |     |
| Spillback Cap Reductn   |     |     |
| Storage Cap Reductn     |     |     |
| Reduced v/c Ratio       |     |     |
| Intersection Summary    |     |     |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                 | 1020                                                                                | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1366                                                                                |
| Future Volume (vph)        | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                 | 1020                                                                                | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1366                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 15.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 65.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 120.0                                                                               |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 20.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 0.99                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     | 0.99                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.925                                                                             |                                                                                   |                                                                                   | 0.872                                                                             |                                                                                   |                                                                                    | 0.995                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1701                                                                              | 1701                                                                              | 0                                                                                 | 1768                                                                              | 1598                                                                              | 0                                                                                 | 1768                                                                               | 3512                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3537                                                                                |
| Flt Permitted              | 0.629                                                                             |                                                                                   |                                                                                   | 0.748                                                                             |                                                                                   |                                                                                   | 0.174                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.255                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1120                                                                              | 1701                                                                              | 0                                                                                 | 1376                                                                              | 1598                                                                              | 0                                                                                 | 324                                                                                | 3512                                                                                | 0                                                                                   | 0                                                                                   | 472                                                                                 | 3537                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 7                                                                                 |                                                                                   |                                                                                   | 97                                                                                |                                                                                   |                                                                                    | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 40                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 65.4                                                                              |                                                                                   |                                                                                   | 381.2                                                                             |                                                                                   |                                                                                    | 479.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 200.7                                                                               |
| Travel Time (s)            |                                                                                   | 4.7                                                                               |                                                                                   |                                                                                   | 34.3                                                                              |                                                                                   |                                                                                    | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     | 10.3                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                 | 10                                                                                 |                                                                                     | 14                                                                                  |                                                                                     | 14                                                                                  |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 5%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                 | 1020                                                                                | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1366                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 23                                                                                | 14                                                                                | 0                                                                                 | 48                                                                                | 114                                                                               | 0                                                                                 | 12                                                                                 | 1054                                                                                | 0                                                                                   | 0                                                                                   | 141                                                                                 | 1366                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        |       |
| Traffic Volume (vph)       | 44    |
| Future Volume (vph)        | 44    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 55.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.95  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1508  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 44    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 10    |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 44    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 44    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | Cl+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 28.3                                                                               | 28.3                                                                                |                                                                                     | 28.3                                                                                | 28.3                                                                                | 28.3                                                                                |
| Total Split (s)         | 38.0                                                                              | 38.0                                                                              |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 82.0                                                                               | 82.0                                                                                |                                                                                     | 82.0                                                                                | 82.0                                                                                | 82.0                                                                                |
| Total Split (%)         | 31.7%                                                                             | 31.7%                                                                             |                                                                                   | 31.7%                                                                             | 31.7%                                                                             |                                                                                   | 68.3%                                                                              | 68.3%                                                                               |                                                                                     | 68.3%                                                                               | 68.3%                                                                               | 68.3%                                                                               |
| Maximum Green (s)       | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 75.7                                                                               | 75.7                                                                                |                                                                                     | 75.7                                                                                | 75.7                                                                                | 75.7                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.1                                                                                | 2.1                                                                                 |                                                                                     | 2.1                                                                                 | 2.1                                                                                 | 2.1                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.3                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 15.0                                                                                |
| Pedestrian Calls (#/hr) | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 14                                                                                 | 14                                                                                  |                                                                                     | 10                                                                                  | 10                                                                                  | 10                                                                                  |
| Act Effct Green (s)     | 14.3                                                                              | 14.3                                                                              |                                                                                   | 14.3                                                                              | 14.3                                                                              |                                                                                   | 93.4                                                                               | 93.4                                                                                |                                                                                     |                                                                                     | 93.4                                                                                | 93.4                                                                                |
| Actuated g/C Ratio      | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.78                                                                               | 0.78                                                                                |                                                                                     |                                                                                     | 0.78                                                                                | 0.78                                                                                |
| v/c Ratio               | 0.17                                                                              | 0.07                                                                              |                                                                                   | 0.29                                                                              | 0.41                                                                              |                                                                                   | 0.05                                                                               | 0.39                                                                                |                                                                                     |                                                                                     | 0.38                                                                                | 0.50                                                                                |
| Control Delay           | 46.9                                                                              | 29.7                                                                              |                                                                                   | 50.1                                                                              | 16.1                                                                              |                                                                                   | 5.8                                                                                | 5.5                                                                                 |                                                                                     |                                                                                     | 15.9                                                                                | 13.6                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 46.9                                                                              | 29.7                                                                              |                                                                                   | 50.1                                                                              | 16.1                                                                              |                                                                                   | 5.8                                                                                | 5.5                                                                                 |                                                                                     |                                                                                     | 15.9                                                                                | 13.6                                                                                |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | B                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 40.4                                                                              |                                                                                   |                                                                                   | 26.2                                                                              |                                                                                   |                                                                                    | 5.5                                                                                 |                                                                                     |                                                                                     |                                                                                     | 13.6                                                                                |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 4.8                                                                               | 1.4                                                                               |                                                                                   | 10.1                                                                              | 3.5                                                                               |                                                                                   | 0.4                                                                                | 24.9                                                                                |                                                                                     |                                                                                     | 17.6                                                                                | 92.4                                                                                |
| Queue Length 95th (m)   | 10.2                                                                              | 6.0                                                                               |                                                                                   | 17.4                                                                              | 16.0                                                                              |                                                                                   | 3.1                                                                                | 68.4                                                                                |                                                                                     |                                                                                     | 34.1                                                                                | 122.0                                                                               |
| Internal Link Dist (m)  |                                                                                   | 41.4                                                                              |                                                                                   |                                                                                   | 357.2                                                                             |                                                                                   |                                                                                    | 455.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 176.7                                                                               |
| Turn Bay Length (m)     | 15.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 120.0                                                                               |                                                                                     |
| Base Capacity (vph)     | 298                                                                               | 458                                                                               |                                                                                   | 366                                                                               | 497                                                                               |                                                                                   | 252                                                                                | 2735                                                                                |                                                                                     |                                                                                     | 367                                                                                 | 2754                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.08                                                                              | 0.03                                                                              |                                                                                   | 0.13                                                                              | 0.23                                                                              |                                                                                   | 0.05                                                                               | 0.39                                                                                |                                                                                     |                                                                                     | 0.38                                                                                | 0.50                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 115 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 11.6

Intersection LOS: B

Intersection Capacity Utilization 76.7%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Terry Fox & Halkirk/Winchester



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 28.3  |
| Total Split (s)         | 82.0  |
| Total Split (%)         | 68.3% |
| Maximum Green (s)       | 75.7  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.1   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.3   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 15.0  |
| Pedestrian Calls (#/hr) | 10    |
| Act Effct Green (s)     | 93.4  |
| Actuated g/C Ratio      | 0.78  |
| v/c Ratio               | 0.04  |
| Control Delay           | 5.7   |
| Queue Delay             | 0.0   |
| Total Delay             | 5.7   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 1.3   |
| Queue Length 95th (m)   | m6.3  |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 55.0  |
| Base Capacity (vph)     | 1183  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.04  |
| Intersection Summary    |       |

|                                   |  |  |  |  |  |  |
|-----------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                        | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | NBL                                                                               | NBR                                                                               |
| Lane Configurations               |  |                                                                                   |  |  |  |                                                                                   |
| Traffic Volume (vph)              | 1366                                                                              | 7                                                                                 | 34                                                                                | 1749                                                                              | 5                                                                                 | 23                                                                                |
| Future Volume (vph)               | 1366                                                                              | 7                                                                                 | 34                                                                                | 1749                                                                              | 5                                                                                 | 23                                                                                |
| Ideal Flow (vphpl)                | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)                |                                                                                   | 0.0                                                                               | 85.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                               |
| Storage Lanes                     |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |
| Taper Length (m)                  |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   | 10.0                                                                              |                                                                                   |
| Lane Util. Factor                 | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              |
| Ped Bike Factor                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Frt                               | 0.999                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.889                                                                             |                                                                                   |
| Flt Protected                     |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   | 0.991                                                                             |                                                                                   |
| Satd. Flow (prot)                 | 3498                                                                              | 0                                                                                 | 1751                                                                              | 3502                                                                              | 1624                                                                              | 0                                                                                 |
| Flt Permitted                     |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   | 0.991                                                                             |                                                                                   |
| Satd. Flow (perm)                 | 3498                                                                              | 0                                                                                 | 1751                                                                              | 3502                                                                              | 1624                                                                              | 0                                                                                 |
| Link Speed (k/h)                  | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                | 50                                                                                |                                                                                   |
| Link Distance (m)                 | 150.7                                                                             |                                                                                   |                                                                                   | 644.5                                                                             | 279.6                                                                             |                                                                                   |
| Travel Time (s)                   | 10.9                                                                              |                                                                                   |                                                                                   | 46.4                                                                              | 20.1                                                                              |                                                                                   |
| Confl. Peds. (#/hr)               |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Peak Hour Factor                  | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Adj. Flow (vph)                   | 1366                                                                              | 7                                                                                 | 34                                                                                | 1749                                                                              | 5                                                                                 | 23                                                                                |
| Shared Lane Traffic (%)           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)             | 1373                                                                              | 0                                                                                 | 34                                                                                | 1749                                                                              | 28                                                                                | 0                                                                                 |
| Enter Blocked Intersection        | No                                                                                | No                                                                                | Yes                                                                               | Yes                                                                               | No                                                                                | No                                                                                |
| Lane Alignment                    | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               | 4.0                                                                               |                                                                                   |
| Link Offset(m)                    | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)                | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor                    | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)               |                                                                                   | 97                                                                                | 97                                                                                |                                                                                   | 97                                                                                | 97                                                                                |
| Sign Control                      | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              | Stop                                                                              |                                                                                   |
| Intersection Summary              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Area Type:                        | Other                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Control Type:                     | Unsignalized                                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization | 61.0%                                                                             |                                                                                   |                                                                                   | ICU Level of Service B                                                            |                                                                                   |                                                                                   |
| Analysis Period (min)             | 15                                                                                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |   |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 312                                                                               | 1119                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1418                                                                                | 113                                                                                 | 21                                                                                  | 293                                                                                 | 136                                                                                 | 149                                                                                 |
| Future Volume (vph)        | 2                                                                                 | 312                                                                               | 1119                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1418                                                                                | 113                                                                                 | 21                                                                                  | 293                                                                                 | 136                                                                                 | 149                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                     |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 0.99                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3537                                                                                | 1582                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3426                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3391                                                                              | 3537                                                                                | 1555                                                                                | 1746                                                                                | 3502                                                                                | 1539                                                                                | 3409                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 128                                                                                 |                                                                                     |                                                                                     | 136                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                               |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                                |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 312                                                                               | 1119                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1418                                                                                | 113                                                                                 | 21                                                                                  | 293                                                                                 | 136                                                                                 | 149                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 314                                                                               | 1141                                                                              | 0                                                                                 | 0                                                                                 | 185                                                                               | 1418                                                                                | 113                                                                                 | 21                                                                                  | 293                                                                                 | 136                                                                                 | 149                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 97                                                                                | 14                                                                                | 97                                                                                |                                                                                     | 14                                                                                  | 97                                                                                  |                                                                                     | 97                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 473   | 404   |
| Future Volume (vph)        | 473   | 404   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 60.0  |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3502  | 1582  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3502  | 1555  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 175   |
| Link Speed (k/h)           | 50    |       |
| Link Distance (m)          | 251.2 |       |
| Travel Time (s)            | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 2%    | 1%    |
| Adj. Flow (vph)            | 473   | 404   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 473   | 404   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | R NA  |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 4     |       |
| Permitted Phases           |       | 4     |
| Detector Phase             | 4     | 4     |
| Switch Phase               |       |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 61.0                                                                              |                                                                                   | 15.0                                                                              | 15.0                                                                              | 60.0                                                                                | 60.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 12.3%                                                                             | 12.3%                                                                             | 46.9%                                                                             |                                                                                   | 11.5%                                                                             | 11.5%                                                                             | 46.2%                                                                               | 46.2%                                                                               | 9.2%                                                                                | 32.3%                                                                               | 32.3%                                                                               | 9.2%                                                                                |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 54.9                                                                              |                                                                                   | 8.9                                                                               | 8.9                                                                               | 53.9                                                                                | 53.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                 | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                               | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                                | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 17.4                                                                              | 64.2                                                                              |                                                                                   |                                                                                   | 10.8                                                                              | 57.6                                                                                | 57.6                                                                                | 5.8                                                                                 | 24.7                                                                                | 24.7                                                                                | 5.9                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.13                                                                              | 0.49                                                                              |                                                                                   |                                                                                   | 0.08                                                                              | 0.44                                                                                | 0.44                                                                                | 0.04                                                                                | 0.19                                                                                | 0.19                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.69                                                                              | 0.66                                                                              |                                                                                   |                                                                                   | 0.66                                                                              | 0.90                                                                                | 0.15                                                                                | 0.27                                                                                | 0.44                                                                                | 0.34                                                                                | 0.96                                                                                |
| Control Delay           |                                                                                   | 62.7                                                                              | 28.9                                                                              |                                                                                   |                                                                                   | 82.5                                                                              | 32.9                                                                                | 2.2                                                                                 | 68.8                                                                                | 46.9                                                                                | 8.2                                                                                 | 124.1                                                                               |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 62.7                                                                              | 28.9                                                                              |                                                                                   |                                                                                   | 82.5                                                                              | 32.9                                                                                | 2.2                                                                                 | 68.8                                                                                | 46.9                                                                                | 8.2                                                                                 | 124.1                                                                               |
| LOS                     |                                                                                   | E                                                                                 | C                                                                                 |                                                                                   |                                                                                   | F                                                                                 | C                                                                                   | A                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   | F                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 36.2                                                                              |                                                                                   |                                                                                   |                                                                                   | 36.3                                                                                |                                                                                     |                                                                                     | 36.3                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 36.7                                                                              | 112.2                                                                             |                                                                                   |                                                                                   | 18.9                                                                              | 186.8                                                                               | 5.4                                                                                 | 4.9                                                                                 | 31.5                                                                                | 0.0                                                                                 | 18.4                                                                                |
| Queue Length 95th (m)   |                                                                                   | #73.1                                                                             | 144.4                                                                             |                                                                                   |                                                                                   | #38.5                                                                             | #218.6                                                                              | m3.1                                                                                | 13.1                                                                                | 40.3                                                                                | 13.9                                                                                | #38.4                                                                               |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                               |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 458                                                                               | 1725                                                                              |                                                                                   |                                                                                   | 281                                                                               | 1567                                                                                | 760                                                                                 | 79                                                                                  | 967                                                                                 | 523                                                                                 | 155                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.69                                                                              | 0.66                                                                              |                                                                                   |                                                                                   | 0.66                                                                              | 0.90                                                                                | 0.15                                                                                | 0.27                                                                                | 0.30                                                                                | 0.26                                                                                | 0.96                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 15 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 40.7

Intersection LOS: D

Intersection Capacity Utilization 102.6%

ICU Level of Service G

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Hazeldean & Robert Grant





| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 41.1  | 41.1  |
| Total Split (s)         | 42.0  | 42.0  |
| Total Split (%)         | 32.3% | 32.3% |
| Maximum Green (s)       | 35.9  | 35.9  |
| Yellow Time (s)         | 3.3   | 3.3   |
| All-Red Time (s)        | 2.8   | 2.8   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.1   | 6.1   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 28.0  | 28.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 29.5  | 29.5  |
| Actuated g/C Ratio      | 0.23  | 0.23  |
| v/c Ratio               | 0.59  | 0.83  |
| Control Delay           | 47.7  | 41.2  |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 47.7  | 41.2  |
| LOS                     | D     | D     |
| Approach Delay          | 56.2  |       |
| Approach LOS            | E     |       |
| Queue Length 50th (m)   | 53.8  | 55.2  |
| Queue Length 95th (m)   | 64.6  | 85.7  |
| Internal Link Dist (m)  | 227.2 |       |
| Turn Bay Length (m)     |       | 60.0  |
| Base Capacity (vph)     | 967   | 556   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.49  | 0.73  |
| Intersection Summary    |       |       |



4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2031 Total Traffic (demand rationalized)

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 411                                                                               | 811                                                                               | 274                                                                               | 14                                                                                | 312                                                                               | 910                                                                                | 319                                                                                 | 302                                                                                 | 813                                                                                 | 215                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 2                                                                                 | 411                                                                               | 811                                                                               | 274                                                                               | 14                                                                                | 312                                                                               | 910                                                                                | 319                                                                                 | 302                                                                                 | 813                                                                                 | 215                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.95                                                                              |                                                                                   | 0.99                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 3364                                                                              | 3537                                                                              | 1551                                                                              | 0                                                                                 | 3398                                                                              | 3537                                                                               | 1551                                                                                | 3397                                                                                | 3468                                                                                | 1567                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 3358                                                                              | 3537                                                                              | 1481                                                                              | 0                                                                                 | 3366                                                                              | 3537                                                                               | 1521                                                                                | 3386                                                                                | 3468                                                                                | 1527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 236                                                                               |                                                                                   |                                                                                   |                                                                                    | 174                                                                                 |                                                                                     |                                                                                     | 150                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 644.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 38.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 24                                                                                |                                                                                   | 24                                                                                |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 3%                                                                                  | 2%                                                                                  | 3%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 411                                                                               | 811                                                                               | 274                                                                               | 14                                                                                | 312                                                                               | 910                                                                                | 319                                                                                 | 302                                                                                 | 813                                                                                 | 215                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 413                                                                               | 811                                                                               | 274                                                                               | 0                                                                                 | 326                                                                               | 910                                                                                | 319                                                                                 | 302                                                                                 | 813                                                                                 | 215                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2031 Total Traffic (demand rationalized)

|                            |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                 | SBL                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations        |  |  |  |
| Traffic Volume (vph)       | 307                                                                               | 818                                                                               | 447                                                                               |
| Future Volume (vph)        | 307                                                                               | 818                                                                               | 447                                                                               |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)         | 155.0                                                                             |                                                                                   | 200.0                                                                             |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              |
| Ped Bike Factor            | 0.99                                                                              |                                                                                   | 0.98                                                                              |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)          | 3431                                                                              | 3502                                                                              | 1567                                                                              |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)          | 3408                                                                              | 3502                                                                              | 1537                                                                              |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 265                                                                               |
| Link Speed (k/h)           |                                                                                   | 70                                                                                |                                                                                   |
| Link Distance (m)          |                                                                                   | 316.2                                                                             |                                                                                   |
| Travel Time (s)            |                                                                                   | 16.3                                                                              |                                                                                   |
| Confl. Peds. (#/hr)        | 10                                                                                |                                                                                   | 5                                                                                 |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 2%                                                                                |
| Adj. Flow (vph)            | 307                                                                               | 818                                                                               | 447                                                                               |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)      | 308                                                                               | 818                                                                               | 447                                                                               |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)            |                                                                                   | 10.0                                                                              |                                                                                   |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 | 1                                                                                 |
| Detector Template          | Left                                                                              | Thru                                                                              | Right                                                                             |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              |
| Protected Phases           | 1                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   | 6                                                                                 |
| Detector Phase             | 1                                                                                 | 6                                                                                 | 6                                                                                 |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2031 Total Traffic (demand rationalized)

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                               | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                               | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 23.0                                                                              | 23.0                                                                              | 42.0                                                                              | 42.0                                                                              | 23.0                                                                              | 23.0                                                                              | 42.0                                                                               | 42.0                                                                                | 18.0                                                                                | 37.0                                                                                | 37.0                                                                                | 18.0                                                                                |
| Total Split (%)         | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                             | 35.0%                                                                             | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                              | 35.0%                                                                               | 15.0%                                                                               | 30.8%                                                                               | 30.8%                                                                               | 15.0%                                                                               |
| Maximum Green (s)       | 16.5                                                                              | 16.5                                                                              | 35.5                                                                              | 35.5                                                                              | 16.5                                                                              | 16.5                                                                              | 35.5                                                                               | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                | 11.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 24                                                                                | 24                                                                                |                                                                                   |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 16.4                                                                              | 35.4                                                                              | 35.4                                                                              |                                                                                   | 15.3                                                                              | 34.3                                                                               | 34.3                                                                                | 12.0                                                                                | 31.2                                                                                | 31.2                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.30                                                                              | 0.30                                                                              |                                                                                   | 0.13                                                                              | 0.29                                                                               | 0.29                                                                                | 0.10                                                                                | 0.26                                                                                | 0.26                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.90                                                                              | 0.78                                                                              | 0.45                                                                              |                                                                                   | 0.75                                                                              | 0.90                                                                               | 0.57                                                                                | 0.89                                                                                | 0.90                                                                                | 0.42                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 74.3                                                                              | 44.7                                                                              | 9.1                                                                               |                                                                                   | 50.8                                                                              | 62.9                                                                               | 31.7                                                                                | 88.1                                                                                | 50.2                                                                                | 9.0                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 74.3                                                                              | 44.7                                                                              | 9.1                                                                               |                                                                                   | 50.8                                                                              | 62.9                                                                               | 31.7                                                                                | 88.1                                                                                | 50.2                                                                                | 9.2                                                                                 |                                                                                     |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | E                                                                                  | C                                                                                   | F                                                                                   | D                                                                                   | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 46.4                                                                              |                                                                                   |                                                                                   |                                                                                   | 53.9                                                                               |                                                                                     |                                                                                     | 52.2                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 46.0                                                                              | 84.5                                                                              | 6.0                                                                               |                                                                                   | 35.4                                                                              | 104.9                                                                              | 38.3                                                                                | 28.4                                                                                | 91.3                                                                                | 14.3                                                                                |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | #70.8                                                                             | 106.0                                                                             | 26.1                                                                              |                                                                                   | 49.0                                                                              | #132.4                                                                             | 73.8                                                                                | #60.1                                                                               | #124.8                                                                              | 7.5                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 620.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                              |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 462                                                                               | 1052                                                                              | 606                                                                               |                                                                                   | 467                                                                               | 1046                                                                               | 572                                                                                 | 340                                                                                 | 901                                                                                 | 507                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 35                                                                                  |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.89                                                                              | 0.77                                                                              | 0.45                                                                              |                                                                                   | 0.70                                                                              | 0.87                                                                               | 0.56                                                                                | 0.89                                                                                | 0.90                                                                                | 0.46                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 54.0

Intersection LOS: D

Intersection Capacity Utilization 99.5%

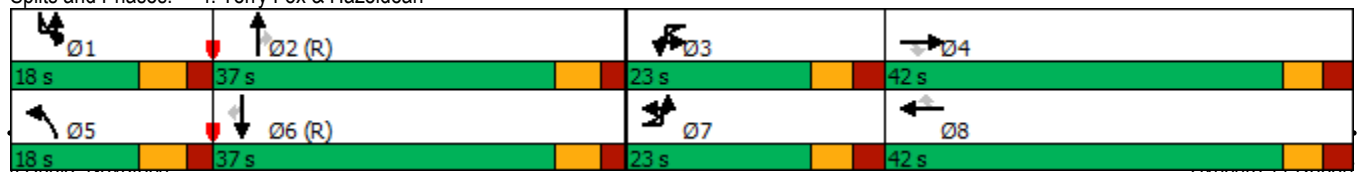
ICU Level of Service F

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean





| Lane Group              | SBL   | SBT    | SBR   |
|-------------------------|-------|--------|-------|
| Switch Phase            |       |        |       |
| Minimum Initial (s)     | 5.0   | 10.0   | 10.0  |
| Minimum Split (s)       | 11.5  | 35.5   | 35.5  |
| Total Split (s)         | 18.0  | 37.0   | 37.0  |
| Total Split (%)         | 15.0% | 30.8%  | 30.8% |
| Maximum Green (s)       | 11.5  | 30.5   | 30.5  |
| Yellow Time (s)         | 4.2   | 4.2    | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3    | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0    | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5    | 6.5   |
| Lead/Lag                | Lead  | Lag    | Lag   |
| Lead-Lag Optimize?      |       |        |       |
| Vehicle Extension (s)   | 3.0   | 3.0    | 3.0   |
| Recall Mode             | None  | C-Max  | C-Max |
| Walk Time (s)           |       | 7.0    | 7.0   |
| Flash Dont Walk (s)     |       | 22.0   | 22.0  |
| Pedestrian Calls (#/hr) |       | 10     | 10    |
| Act Effct Green (s)     | 12.1  | 31.2   | 31.2  |
| Actuated g/C Ratio      | 0.10  | 0.26   | 0.26  |
| v/c Ratio               | 0.90  | 0.90   | 0.75  |
| Control Delay           | 84.6  | 56.7   | 27.6  |
| Queue Delay             | 45.4  | 0.0    | 0.0   |
| Total Delay             | 130.0 | 56.7   | 27.6  |
| LOS                     | F     | E      | C     |
| Approach Delay          |       | 62.8   |       |
| Approach LOS            |       | E      |       |
| Queue Length 50th (m)   | 37.0  | 66.6   | 23.0  |
| Queue Length 95th (m)   | #61.1 | #121.0 | 85.1  |
| Internal Link Dist (m)  |       | 292.2  |       |
| Turn Bay Length (m)     | 155.0 |        | 200.0 |
| Base Capacity (vph)     | 344   | 911    | 596   |
| Starvation Cap Reductn  | 0     | 0      | 0     |
| Spillback Cap Reductn   | 61    | 0      | 0     |
| Storage Cap Reductn     | 0     | 0      | 0     |
| Reduced v/c Ratio       | 1.09  | 0.90   | 0.75  |
| Intersection Summary    |       |        |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 3                                                                                 | 362                                                                               | 1152                                                                              | 13                                                                                | 1                                                                                 | 85                                                                                | 748                                                                                | 69                                                                                  | 24                                                                                  | 524                                                                                 | 194                                                                                 | 29                                                                                  |
| Future Volume (vph)        | 3                                                                                 | 362                                                                               | 1152                                                                              | 13                                                                                | 1                                                                                 | 85                                                                                | 748                                                                                | 69                                                                                  | 24                                                                                  | 524                                                                                 | 194                                                                                 | 29                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                    | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                    |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3396                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3370                                                                               | 1551                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3421                                                                              | 3396                                                                              | 0                                                                                 | 0                                                                                 | 3392                                                                              | 3370                                                                               | 1525                                                                                | 1745                                                                                | 3502                                                                                | 1540                                                                                | 3417                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 145                                                                                 |                                                                                     |                                                                                     | 170                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                              |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                               |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 5%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 6%                                                                                 | 3%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 362                                                                               | 1152                                                                              | 13                                                                                | 1                                                                                 | 85                                                                                | 748                                                                                | 69                                                                                  | 24                                                                                  | 524                                                                                 | 194                                                                                 | 29                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 365                                                                               | 1165                                                                              | 0                                                                                 | 0                                                                                 | 86                                                                                | 748                                                                                | 69                                                                                  | 24                                                                                  | 524                                                                                 | 194                                                                                 | 29                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                  |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                  | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 261   | 146   |
| Future Volume (vph)        | 261   | 146   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 60.0  |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3502  | 1582  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3502  | 1556  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 146   |
| Link Speed (k/h)           | 50    |       |
| Link Distance (m)          | 251.2 |       |
| Travel Time (s)            | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 2%    | 1%    |
| Adj. Flow (vph)            | 261   | 146   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 261   | 146   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | R NA  |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 4     |       |
| Permitted Phases           |       | 4     |
| Detector Phase             | 4     | 4     |
| Switch Phase               |       |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 49.0                                                                              |                                                                                   | 12.0                                                                              | 12.0                                                                              | 45.0                                                                                | 45.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 13.9%                                                                             | 13.9%                                                                             | 42.6%                                                                             |                                                                                   | 10.4%                                                                             | 10.4%                                                                             | 39.1%                                                                               | 39.1%                                                                               | 10.4%                                                                               | 36.5%                                                                               | 36.5%                                                                               | 10.4%                                                                               |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 42.9                                                                              |                                                                                   | 5.9                                                                               | 5.9                                                                               | 38.9                                                                                | 38.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                 | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                               | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                                | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 20.2                                                                              | 60.0                                                                              |                                                                                   |                                                                                   | 7.6                                                                               | 45.0                                                                                | 45.0                                                                                |                                                                                     | 5.8                                                                                 | 24.3                                                                                | 5.8                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.18                                                                              | 0.52                                                                              |                                                                                   |                                                                                   | 0.07                                                                              | 0.39                                                                                | 0.39                                                                                |                                                                                     | 0.05                                                                                | 0.21                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.61                                                                              | 0.66                                                                              |                                                                                   |                                                                                   | 0.39                                                                              | 0.57                                                                                | 0.10                                                                                |                                                                                     | 0.27                                                                                | 0.42                                                                                | 0.17                                                                                |
| Control Delay           |                                                                                   | 50.0                                                                              | 26.0                                                                              |                                                                                   |                                                                                   | 80.6                                                                              | 13.4                                                                                | 1.0                                                                                 |                                                                                     | 60.6                                                                                | 46.9                                                                                | 54.6                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 50.0                                                                              | 26.0                                                                              |                                                                                   |                                                                                   | 80.6                                                                              | 13.4                                                                                | 1.0                                                                                 |                                                                                     | 60.6                                                                                | 46.9                                                                                | 54.6                                                                                |
| LOS                     |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   |                                                                                   | F                                                                                 | B                                                                                   | A                                                                                   |                                                                                     | E                                                                                   | D                                                                                   | D                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 31.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 18.8                                                                                |                                                                                     |                                                                                     | 37.7                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   | B                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 36.0                                                                              | 101.6                                                                             |                                                                                   |                                                                                   | 9.9                                                                               | 72.0                                                                                | 1.7                                                                                 |                                                                                     | 4.9                                                                                 | 54.0                                                                                | 3.0                                                                                 |
| Queue Length 95th (m)   |                                                                                   | #72.5                                                                             | #158.6                                                                            |                                                                                   |                                                                                   | 17.7                                                                              | 9.4                                                                                 | 0.0                                                                                 |                                                                                     | 12.9                                                                                | 61.8                                                                                | 7.5                                                                                 |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                               |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               |                                                                                     | 100.0                                                                               |                                                                                     | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 602                                                                               | 1773                                                                              |                                                                                   |                                                                                   | 223                                                                               | 1317                                                                                | 684                                                                                 |                                                                                     | 89                                                                                  | 1093                                                                                | 176                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.61                                                                              | 0.66                                                                              |                                                                                   |                                                                                   | 0.39                                                                              | 0.57                                                                                | 0.10                                                                                |                                                                                     | 0.27                                                                                | 0.48                                                                                | 0.16                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 19 (17%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 29.4

Intersection LOS: C

Intersection Capacity Utilization 78.4%

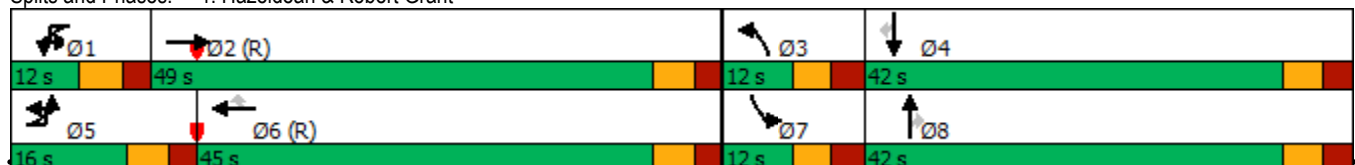
ICU Level of Service D

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Hazeldean & Robert Grant





| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 41.1  | 41.1  |
| Total Split (s)         | 42.0  | 42.0  |
| Total Split (%)         | 36.5% | 36.5% |
| Maximum Green (s)       | 35.9  | 35.9  |
| Yellow Time (s)         | 3.3   | 3.3   |
| All-Red Time (s)        | 2.8   | 2.8   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.1   | 6.1   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | None  | None  |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 28.0  | 28.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 24.3  | 24.3  |
| Actuated g/C Ratio      | 0.21  | 0.21  |
| v/c Ratio               | 0.35  | 0.33  |
| Control Delay           | 38.8  | 7.2   |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 38.8  | 7.2   |
| LOS                     | D     | A     |
| Approach Delay          | 29.3  |       |
| Approach LOS            | C     |       |
| Queue Length 50th (m)   | 24.6  | 0.0   |
| Queue Length 95th (m)   | 31.2  | 13.0  |
| Internal Link Dist (m)  | 227.2 |       |
| Turn Bay Length (m)     |       | 60.0  |
| Base Capacity (vph)     | 1093  | 586   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.24  | 0.25  |
| Intersection Summary    |       |       |



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 1                                                                                 | 107                                                                               | 1095                                                                              | 52                                                                                | 21                                                                                | 886                                                                               | 47                                                                                 | 37                                                                                  | 0                                                                                   | 32                                                                                  | 28                                                                                  | 0                                                                                   |
| Future Volume (vph)        | 1                                                                                 | 107                                                                               | 1095                                                                              | 52                                                                                | 21                                                                                | 886                                                                               | 47                                                                                 | 37                                                                                  | 0                                                                                   | 32                                                                                  | 28                                                                                  | 0                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 75.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 180.0                                                                              | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 75.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                    | 10.0                                                                                |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   | 0.97                                                                               | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   | 0.993                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                              |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1768                                                                              | 3409                                                                              | 0                                                                                 | 1751                                                                              | 3402                                                                              | 1567                                                                               | 1751                                                                                | 1537                                                                                | 0                                                                                   | 1768                                                                                | 1843                                                                                |
| Flt Permitted              |                                                                                   | 0.272                                                                             |                                                                                   |                                                                                   | 0.248                                                                             |                                                                                   |                                                                                    | 0.757                                                                               |                                                                                     |                                                                                     | 0.736                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 505                                                                               | 3409                                                                              | 0                                                                                 | 456                                                                               | 3402                                                                              | 1518                                                                               | 1386                                                                                | 1537                                                                                | 0                                                                                   | 1361                                                                                | 1843                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 9                                                                                 |                                                                                   |                                                                                   |                                                                                   | 89                                                                                 |                                                                                     | 119                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                    |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |
| Link Distance (m)          |                                                                                   |                                                                                   | 297.5                                                                             |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                    |                                                                                     | 259.5                                                                               |                                                                                     |                                                                                     | 237.4                                                                               |
| Travel Time (s)            |                                                                                   |                                                                                   | 17.9                                                                              |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                    |                                                                                     | 18.7                                                                                |                                                                                     |                                                                                     | 17.1                                                                                |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 4%                                                                                | 2%                                                                                | 2%                                                                                | 5%                                                                                | 2%                                                                                 | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  | 2%                                                                                  |
| Adj. Flow (vph)            | 1                                                                                 | 107                                                                               | 1095                                                                              | 52                                                                                | 21                                                                                | 886                                                                               | 47                                                                                 | 37                                                                                  | 0                                                                                   | 32                                                                                  | 28                                                                                  | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 108                                                                               | 1147                                                                              | 0                                                                                 | 21                                                                                | 886                                                                               | 47                                                                                 | 37                                                                                  | 32                                                                                  | 0                                                                                   | 28                                                                                  | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                               | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                    |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                    |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                 | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                  | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                              | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                                | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                                | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                    |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                    |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                    |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | pm+pt                                                                             | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                               | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                |                                                                                     |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |
| Permitted Phases           | 2                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                  | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 | 6                                                                                  | 8                                                                                   | 8                                                                                   |                                                                                     | 4                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | 7     |
| Traffic Volume (vph)       | 17    |
| Future Volume (vph)        | 17    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 40.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.98  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1552  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 269   |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 17    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 17    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 4     |
| Detector Phase             | 4     |
| Switch Phase               |       |

2: Hazeldean & Roger Griffiths  
AM Peak Hour

560 Hazeldean Road  
2036 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 11.2                                                                              | 11.2                                                                              | 31.3                                                                              |                                                                                   | 31.3                                                                              | 31.3                                                                              | 31.3                                                                               | 31.2                                                                                | 31.2                                                                                |                                                                                     | 31.2                                                                                | 31.2                                                                                |
| Total Split (s)         | 20.0                                                                              | 20.0                                                                              | 82.0                                                                              |                                                                                   | 62.0                                                                              | 62.0                                                                              | 62.0                                                                               | 33.0                                                                                | 33.0                                                                                |                                                                                     | 33.0                                                                                | 33.0                                                                                |
| Total Split (%)         | 17.4%                                                                             | 17.4%                                                                             | 71.3%                                                                             |                                                                                   | 53.9%                                                                             | 53.9%                                                                             | 53.9%                                                                              | 28.7%                                                                               | 28.7%                                                                               |                                                                                     | 28.7%                                                                               | 28.7%                                                                               |
| Maximum Green (s)       | 13.8                                                                              | 13.8                                                                              | 75.7                                                                              |                                                                                   | 55.7                                                                              | 55.7                                                                              | 55.7                                                                               | 26.8                                                                                | 26.8                                                                                |                                                                                     | 26.8                                                                                | 26.8                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.3                                                                                 | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.5                                                                               | 2.5                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                               | 2.6                                                                               | 2.6                                                                                | 2.9                                                                                 | 2.9                                                                                 |                                                                                     | 2.9                                                                                 | 2.9                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.2                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               | 6.3                                                                                | 6.2                                                                                 | 6.2                                                                                 |                                                                                     | 6.2                                                                                 | 6.2                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               | Lag                                                                               | Lag                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | C-Max                                                                             | C-Max                                                                             | C-Max                                                                              | None                                                                                | None                                                                                |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   | 18.0                                                                              | 18.0                                                                              | 18.0                                                                               | 18.0                                                                                | 18.0                                                                                |                                                                                     | 18.0                                                                                | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 92.8                                                                              | 94.0                                                                              |                                                                                   | 79.3                                                                              | 79.3                                                                              | 79.3                                                                               | 13.0                                                                                | 13.0                                                                                |                                                                                     | 13.0                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.81                                                                              | 0.82                                                                              |                                                                                   | 0.69                                                                              | 0.69                                                                              | 0.69                                                                               | 0.11                                                                                | 0.11                                                                                |                                                                                     | 0.11                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.22                                                                              | 0.41                                                                              |                                                                                   | 0.07                                                                              | 0.38                                                                              | 0.04                                                                               | 0.24                                                                                | 0.11                                                                                |                                                                                     | 0.18                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 4.6                                                                               | 3.8                                                                               |                                                                                   | 6.1                                                                               | 10.1                                                                              | 1.9                                                                                | 47.9                                                                                | 0.8                                                                                 |                                                                                     | 46.4                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 4.6                                                                               | 3.8                                                                               |                                                                                   | 6.1                                                                               | 10.1                                                                              | 1.9                                                                                | 47.9                                                                                | 0.8                                                                                 |                                                                                     | 46.4                                                                                |                                                                                     |
| LOS                     |                                                                                   | A                                                                                 | A                                                                                 |                                                                                   | A                                                                                 | B                                                                                 | A                                                                                  | D                                                                                   | A                                                                                   |                                                                                     | D                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 3.9                                                                               |                                                                                   |                                                                                   | 9.6                                                                               |                                                                                    |                                                                                     | 26.1                                                                                |                                                                                     |                                                                                     | 28.9                                                                                |
| Approach LOS            |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                    |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 2.7                                                                               | 15.6                                                                              |                                                                                   | 1.8                                                                               | 64.5                                                                              | 1.6                                                                                | 7.3                                                                                 | 0.0                                                                                 |                                                                                     | 5.5                                                                                 |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | m10.4                                                                             | 45.9                                                                              |                                                                                   | m4.8                                                                              | 110.4                                                                             | 3.5                                                                                | 14.6                                                                                | 0.0                                                                                 |                                                                                     | 11.9                                                                                |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 273.5                                                                             |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                    |                                                                                     | 235.5                                                                               |                                                                                     |                                                                                     | 213.4                                                                               |
| Turn Bay Length (m)     |                                                                                   | 75.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 180.0                                                                              |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 559                                                                               | 2788                                                                              |                                                                                   | 314                                                                               | 2346                                                                              | 1074                                                                               | 322                                                                                 | 449                                                                                 |                                                                                     | 317                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.19                                                                              | 0.41                                                                              |                                                                                   | 0.07                                                                              | 0.38                                                                              | 0.04                                                                               | 0.11                                                                                | 0.07                                                                                |                                                                                     | 0.09                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 10 (9%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.41

Intersection Signal Delay: 7.4

Intersection LOS: A

Intersection Capacity Utilization 71.5%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Hazeldean & Roger Griffiths





| Lane Group              | SBR   |
|-------------------------|-------|
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 31.2  |
| Total Split (s)         | 33.0  |
| Total Split (%)         | 28.7% |
| Maximum Green (s)       | 26.8  |
| Yellow Time (s)         | 3.3   |
| All-Red Time (s)        | 2.9   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.2   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | None  |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 18.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 13.0  |
| Actuated g/C Ratio      | 0.11  |
| v/c Ratio               | 0.04  |
| Control Delay           | 0.2   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.2   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.0   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 40.0  |
| Base Capacity (vph)     | 567   |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.03  |
| Intersection Summary    |       |

3: Mantra/Tillage & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |  |
| Traffic Volume (vph)       | 45                                                                                | 1054                                                                              | 16                                                                                | 22                                                                                | 816                                                                               | 113                                                                               | 33                                                                                 | 0                                                                                   | 93                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Future Volume (vph)        | 45                                                                                | 1054                                                                              | 16                                                                                | 22                                                                                | 816                                                                               | 113                                                                               | 33                                                                                 | 0                                                                                   | 93                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 80.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 105.0                                                                             | 55.0                                                                               |                                                                                     | 0.0                                                                                 | 35.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 2                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)           | 60.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                               |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 0.97                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.97                                                                              | 0.99                                                                               | 0.98                                                                                |                                                                                     | 0.99                                                                                | 0.98                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.998                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.858                                                                               |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 3453                                                                              | 0                                                                                 | 1768                                                                              | 3537                                                                              | 1551                                                                              | 1768                                                                               | 1522                                                                                | 0                                                                                   | 3332                                                                                | 1569                                                                                | 0                                                                                   |
| Flt Permitted              | 0.276                                                                             |                                                                                   |                                                                                   | 0.211                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 513                                                                               | 3453                                                                              | 0                                                                                 | 393                                                                               | 3537                                                                              | 1503                                                                              | 1757                                                                               | 1522                                                                                | 0                                                                                   | 3298                                                                                | 1569                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   | 153                                                                               |                                                                                    | 327                                                                                 |                                                                                     |                                                                                     | 36                                                                                  |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                    | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                   | 150.7                                                                             |                                                                                   |                                                                                    | 289.2                                                                               |                                                                                     |                                                                                     | 233.8                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                   |                                                                                    | 20.8                                                                                |                                                                                     |                                                                                     | 16.8                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 16%                                                                               | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                 | 1%                                                                                  | 3%                                                                                  | 4%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 45                                                                                | 1054                                                                              | 16                                                                                | 22                                                                                | 816                                                                               | 113                                                                               | 33                                                                                 | 0                                                                                   | 93                                                                                  | 74                                                                                  | 2                                                                                   | 36                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 45                                                                                | 1070                                                                              | 0                                                                                 | 22                                                                                | 816                                                                               | 113                                                                               | 33                                                                                 | 93                                                                                  | 0                                                                                   | 74                                                                                  | 38                                                                                  | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | R NA                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |                                                                                     |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                | Perm                                                                              | Prot                                                                               | NA                                                                                  |                                                                                     | Prot                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                   | 3                                                                                  | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                 |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector Phase             | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 | 6                                                                                 | 3                                                                                  | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

3: Mantra/Tillage & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Total Traffic

|                         |  |       |     |       |       |       |       |       |     |       |       |     |
|-------------------------|------------------------------------------------------------------------------------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-----|
| Lane Group              | EBL                                                                                | EBT   | EBR | WBL   | WBT   | WBR   | NBL   | NBT   | NBR | SBL   | SBT   | SBR |
| Minimum Initial (s)     | 5.0                                                                                | 10.0  |     | 5.0   | 10.0  | 10.0  | 5.0   | 10.0  |     | 5.0   | 10.0  |     |
| Minimum Split (s)       | 11.1                                                                               | 31.3  |     | 11.1  | 31.3  | 31.3  | 11.5  | 31.5  |     | 11.5  | 31.5  |     |
| Total Split (s)         | 12.0                                                                               | 43.0  |     | 12.0  | 43.0  | 43.0  | 28.0  | 32.0  |     | 28.0  | 32.0  |     |
| Total Split (%)         | 10.4%                                                                              | 37.4% |     | 10.4% | 37.4% | 37.4% | 24.3% | 27.8% |     | 24.3% | 27.8% |     |
| Maximum Green (s)       | 5.9                                                                                | 36.7  |     | 5.9   | 36.7  | 36.7  | 21.5  | 25.5  |     | 21.5  | 25.5  |     |
| Yellow Time (s)         | 3.7                                                                                | 3.7   |     | 3.7   | 3.7   | 3.7   | 3.3   | 3.3   |     | 3.3   | 3.3   |     |
| All-Red Time (s)        | 2.4                                                                                | 2.6   |     | 2.4   | 2.6   | 2.6   | 3.2   | 3.2   |     | 3.2   | 3.2   |     |
| Lost Time Adjust (s)    | 0.0                                                                                | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Lost Time (s)     | 6.1                                                                                | 6.3   |     | 6.1   | 6.3   | 6.3   | 6.5   | 6.5   |     | 6.5   | 6.5   |     |
| Lead/Lag                | Lead                                                                               | Lag   |     | Lead  | Lag   | Lag   | Lag   | Lead  |     | Lag   | Lead  |     |
| Lead-Lag Optimize?      |                                                                                    |       |     |       |       |       |       |       |     |       |       |     |
| Vehicle Extension (s)   | 3.0                                                                                | 3.0   |     | 3.0   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |     |
| Recall Mode             | None                                                                               | C-Max |     | None  | C-Max | C-Max | None  | None  |     | None  | None  |     |
| Walk Time (s)           |                                                                                    | 7.0   |     |       | 7.0   | 7.0   |       | 7.0   |     |       | 7.0   |     |
| Flash Dont Walk (s)     |                                                                                    | 18.0  |     |       | 18.0  | 18.0  |       | 18.0  |     |       | 18.0  |     |
| Pedestrian Calls (#/hr) |                                                                                    | 5     |     |       | 5     | 5     |       | 5     |     |       | 5     |     |
| Act Effct Green (s)     | 75.4                                                                               | 72.1  |     | 71.9  | 66.8  | 66.8  | 7.8   | 13.0  |     | 8.0   | 15.7  |     |
| Actuated g/C Ratio      | 0.66                                                                               | 0.63  |     | 0.63  | 0.58  | 0.58  | 0.07  | 0.11  |     | 0.07  | 0.14  |     |
| v/c Ratio               | 0.11                                                                               | 0.49  |     | 0.07  | 0.40  | 0.12  | 0.28  | 0.20  |     | 0.32  | 0.16  |     |
| Control Delay           | 6.8                                                                                | 17.3  |     | 10.0  | 16.7  | 1.6   | 56.0  | 1.0   |     | 54.1  | 15.3  |     |
| Queue Delay             | 0.0                                                                                | 0.0   |     | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |     |
| Total Delay             | 6.8                                                                                | 17.3  |     | 10.0  | 16.7  | 1.6   | 56.0  | 1.0   |     | 54.1  | 15.3  |     |
| LOS                     | A                                                                                  | B     |     | B     | B     | A     | E     | A     |     | D     | B     |     |
| Approach Delay          |                                                                                    | 16.9  |     |       | 14.8  |       |       | 15.4  |     |       | 41.0  |     |
| Approach LOS            |                                                                                    | B     |     |       | B     |       |       | B     |     |       | D     |     |
| Queue Length 50th (m)   | 2.7                                                                                | 96.4  |     | 1.3   | 47.4  | 0.0   | 6.6   | 0.0   |     | 7.6   | 0.4   |     |
| Queue Length 95th (m)   | 9.5                                                                                | 102.1 |     | 5.7   | 86.4  | 4.7   | 15.5  | 0.0   |     | 14.2  | 8.4   |     |
| Internal Link Dist (m)  |                                                                                    | 263.2 |     |       | 126.7 |       |       | 265.2 |     |       | 209.8 |     |
| Turn Bay Length (m)     | 80.0                                                                               |       |     | 70.0  |       | 105.0 | 55.0  |       |     | 35.0  |       |     |
| Base Capacity (vph)     | 409                                                                                | 2164  |     | 320   | 2053  | 936   | 330   | 591   |     | 622   | 375   |     |
| Starvation Cap Reductn  | 0                                                                                  | 0     |     | 0     | 0     | 0     | 0     | 0     |     | 0     | 0     |     |
| Spillback Cap Reductn   | 0                                                                                  | 0     |     | 0     | 0     | 0     | 0     | 0     |     | 0     | 0     |     |
| Storage Cap Reductn     | 0                                                                                  | 0     |     | 0     | 0     | 0     | 0     | 0     |     | 0     | 0     |     |
| Reduced v/c Ratio       | 0.11                                                                               | 0.49  |     | 0.07  | 0.40  | 0.12  | 0.10  | 0.16  |     | 0.12  | 0.10  |     |

Intersection Summary

Area Type: Other

Cycle Length: 115

Actuated Cycle Length: 115

Offset: 98 (85%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.49

Intersection Signal Delay: 17.1

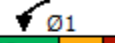
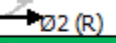
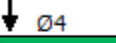
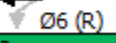
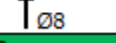
Intersection LOS: B

Intersection Capacity Utilization 60.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 3: Mantra/Tillage & Hazeldean

|                                                                                     |  |                                                                                     |  |                                                                                     |  |                                                                                       |  |
|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------|--|
|  |  |  |  |  |  |  |  |
| 12 s                                                                                |  | 43 s                                                                                |  | 32 s                                                                                |  | 28 s                                                                                  |  |
|  |  |  |  |  |  |  |  |
| 12 s                                                                                |  | 43 s                                                                                |  | 32 s                                                                                |  | 28 s                                                                                  |  |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 305                                                                               | 997                                                                               | 204                                                                               | 5                                                                                 | 154                                                                               | 464                                                                                | 211                                                                                 | 209                                                                                 | 938                                                                                 | 307                                                                                 | 209                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 305                                                                               | 997                                                                               | 204                                                                               | 5                                                                                 | 154                                                                               | 464                                                                                | 211                                                                                 | 209                                                                                 | 938                                                                                 | 307                                                                                 | 209                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     | 75.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.98                                                                              |                                                                                   | 1.00                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3213                                                                              | 3468                                                                              | 1508                                                                              | 0                                                                                 | 3398                                                                              | 3435                                                                               | 1537                                                                                | 3300                                                                                | 3468                                                                                | 1567                                                                                | 3179                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3203                                                                              | 3468                                                                              | 1479                                                                              | 0                                                                                 | 3393                                                                              | 3435                                                                               | 1504                                                                                | 3284                                                                                | 3468                                                                                | 1538                                                                                | 3171                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 204                                                                               |                                                                                   |                                                                                   |                                                                                    | 228                                                                                 |                                                                                     |                                                                                     | 228                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 644.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 38.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                    | 4                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 8%                                                                                | 3%                                                                                | 6%                                                                                | 1%                                                                                | 2%                                                                                | 4%                                                                                 | 4%                                                                                  | 5%                                                                                  | 3%                                                                                  | 2%                                                                                  | 9%                                                                                  |
| Adj. Flow (vph)            | 7                                                                                 | 305                                                                               | 997                                                                               | 204                                                                               | 5                                                                                 | 154                                                                               | 464                                                                                | 211                                                                                 | 209                                                                                 | 938                                                                                 | 307                                                                                 | 209                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 312                                                                               | 997                                                                               | 204                                                                               | 0                                                                                 | 159                                                                               | 464                                                                                | 211                                                                                 | 209                                                                                 | 938                                                                                 | 307                                                                                 | 209                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Total Traffic

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 510   | 371   |
| Future Volume (vph)        | 510   | 371   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 200.0 |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3402  | 1508  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3402  | 1481  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 232   |
| Link Speed (k/h)           | 70    |       |
| Link Distance (m)          | 316.2 |       |
| Travel Time (s)            | 16.3  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Confl. Bikes (#/hr)        |       |       |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 5%    | 6%    |
| Adj. Flow (vph)            | 510   | 371   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 510   | 371   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | Right |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | Cl+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 6     |       |
| Permitted Phases           |       | 6     |
| Detector Phase             | 6     | 6     |



4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                                | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 21.0                                                                              | 21.0                                                                              | 43.0                                                                              | 43.0                                                                              | 14.0                                                                              | 14.0                                                                              | 36.0                                                                                | 36.0                                                                                | 17.0                                                                                | 36.0                                                                                | 36.0                                                                                | 17.0                                                                                |
| Total Split (%)         | 19.1%                                                                             | 19.1%                                                                             | 39.1%                                                                             | 39.1%                                                                             | 12.7%                                                                             | 12.7%                                                                             | 32.7%                                                                               | 32.7%                                                                               | 15.5%                                                                               | 32.7%                                                                               | 32.7%                                                                               | 15.5%                                                                               |
| Maximum Green (s)       | 14.5                                                                              | 14.5                                                                              | 36.5                                                                              | 36.5                                                                              | 7.5                                                                               | 7.5                                                                               | 29.5                                                                                | 29.5                                                                                | 10.5                                                                                | 29.5                                                                                | 29.5                                                                                | 10.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                 | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                                | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                                | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 13.9                                                                              | 35.2                                                                              | 35.2                                                                              |                                                                                   | 7.5                                                                               | 28.8                                                                                | 28.8                                                                                | 10.2                                                                                | 31.0                                                                                | 31.0                                                                                | 10.3                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.13                                                                              | 0.32                                                                              | 0.32                                                                              |                                                                                   | 0.07                                                                              | 0.26                                                                                | 0.26                                                                                | 0.09                                                                                | 0.28                                                                                | 0.28                                                                                | 0.09                                                                                |
| v/c Ratio               |                                                                                   | 0.77                                                                              | 0.90                                                                              | 0.33                                                                              |                                                                                   | 0.69                                                                              | 0.52                                                                                | 0.38                                                                                | 0.68                                                                                | 0.96                                                                                | 0.51                                                                                | 0.70                                                                                |
| Control Delay           |                                                                                   | 60.0                                                                              | 47.5                                                                              | 5.3                                                                               |                                                                                   | 60.8                                                                              | 39.3                                                                                | 14.0                                                                                | 65.6                                                                                | 51.9                                                                                | 8.6                                                                                 | 57.3                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 60.0                                                                              | 47.5                                                                              | 5.3                                                                               |                                                                                   | 60.8                                                                              | 39.3                                                                                | 14.0                                                                                | 65.6                                                                                | 51.9                                                                                | 8.6                                                                                 | 57.3                                                                                |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | D                                                                                   | B                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   | E                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 44.4                                                                              |                                                                                   |                                                                                   |                                                                                   | 37.0                                                                                |                                                                                     |                                                                                     | 44.7                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 31.0                                                                              | 96.6                                                                              | 0.0                                                                               |                                                                                   | 16.2                                                                              | 46.0                                                                                | 4.1                                                                                 | 14.3                                                                                | ~99.7                                                                               | 24.5                                                                                | 20.9                                                                                |
| Queue Length 95th (m)   |                                                                                   | #45.3                                                                             | #123.5                                                                            | 14.1                                                                              |                                                                                   | #28.6                                                                             | 60.4                                                                                | 32.9                                                                                | 34.2                                                                                | #137.7                                                                              | 7.2                                                                                 | #30.2                                                                               |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 620.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                               |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                     | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Base Capacity (vph)     |                                                                                   | 423                                                                               | 1150                                                                              | 627                                                                               |                                                                                   | 231                                                                               | 921                                                                                 | 570                                                                                 | 317                                                                                 | 977                                                                                 | 597                                                                                 | 306                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.74                                                                              | 0.87                                                                              | 0.33                                                                              |                                                                                   | 0.69                                                                              | 0.50                                                                                | 0.37                                                                                | 0.66                                                                                | 0.96                                                                                | 0.51                                                                                | 0.68                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 76 (69%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 40.4

Intersection LOS: D

Intersection Capacity Utilization 89.2%

ICU Level of Service E

Analysis Period (min) 15

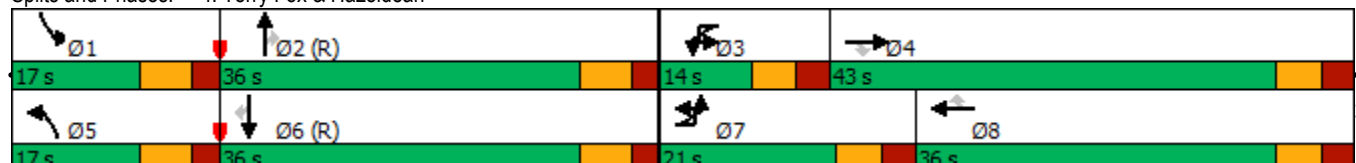
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

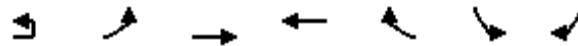
Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean

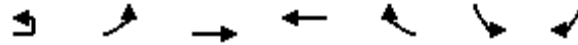




| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Switch Phase            |       |       |
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 35.5  | 35.5  |
| Total Split (s)         | 36.0  | 36.0  |
| Total Split (%)         | 32.7% | 32.7% |
| Maximum Green (s)       | 29.5  | 29.5  |
| Yellow Time (s)         | 4.2   | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 22.0  | 22.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 31.1  | 31.1  |
| Actuated g/C Ratio      | 0.28  | 0.28  |
| v/c Ratio               | 0.53  | 0.64  |
| Control Delay           | 30.7  | 19.2  |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 30.7  | 19.2  |
| LOS                     | C     | B     |
| Approach Delay          | 31.9  |       |
| Approach LOS            | C     |       |
| Queue Length 50th (m)   | 45.9  | 31.4  |
| Queue Length 95th (m)   | 61.4  | 69.0  |
| Internal Link Dist (m)  | 292.2 |       |
| Turn Bay Length (m)     |       | 200.0 |
| Base Capacity (vph)     | 962   | 584   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.53  | 0.64  |
| Intersection Summary    |       |       |



| Lane Group                 | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 4     | 121   | 1179  | 941   | 72    | 74    | 68    |
| Future Volume (vph)        | 4     | 121   | 1179  | 941   | 72    | 74    | 68    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 35.0  |       |       | 0.0   | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       |       | 0     | 1     | 1     |
| Taper Length (m)           |       | 40.0  |       |       |       | 40.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  |
| Ped Bike Factor            |       | 1.00  |       | 1.00  |       | 0.99  | 0.98  |
| Frt                        |       |       |       | 0.989 |       |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1719  | 3468  | 3424  | 0     | 1768  | 1537  |
| Flt Permitted              |       | 0.270 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 486   | 3468  | 3424  | 0     | 1747  | 1500  |
| Right Turn on Red          |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 14    |       |       | 68    |
| Link Speed (k/h)           |       |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 157.6 | 314.8 |       | 401.6 |       |
| Travel Time (s)            |       |       | 9.5   | 18.9  |       | 28.9  |       |
| Confl. Peds. (#/hr)        |       | 10    |       |       | 10    | 10    | 10    |
| Peak Hour Factor           | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 1%    | 4%    | 3%    | 3%    | 1%    | 1%    | 4%    |
| Adj. Flow (vph)            | 4     | 121   | 1179  | 941   | 72    | 74    | 68    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 125   | 1179  | 1013  | 0     | 74    | 68    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | L NA  | Left  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 8.0   | 4.0   |       | 4.0   |       |
| Link Offset(m)             |       |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 2     |       | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Thru  |       | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 10.0  |       | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 0.6   |       | 2.0   | 2.0   |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | NA    |       | Perm  | Perm  |
| Protected Phases           |       |       | 2     | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       |       |       | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     |       | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |



| Lane Group              | EBU   | EBL   | EBT   | WBT   | WBR | SBL   | SBR   |
|-------------------------|-------|-------|-------|-------|-----|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0  | 10.0  | 10.0  |     | 10.0  | 10.0  |
| Minimum Split (s)       | 16.2  | 16.2  | 16.2  | 31.2  |     | 34.1  | 34.1  |
| Total Split (s)         | 76.0  | 76.0  | 76.0  | 76.0  |     | 34.0  | 34.0  |
| Total Split (%)         | 69.1% | 69.1% | 69.1% | 69.1% |     | 30.9% | 30.9% |
| Maximum Green (s)       | 69.8  | 69.8  | 69.8  | 69.8  |     | 27.9  | 27.9  |
| Yellow Time (s)         | 3.7   | 3.7   | 3.7   | 3.7   |     | 3.3   | 3.3   |
| All-Red Time (s)        | 2.5   | 2.5   | 2.5   | 2.5   |     | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0   | 0.0   | 0.0   |     | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.2   | 6.2   | 6.2   |     | 6.1   | 6.1   |
| Lead/Lag                |       |       |       |       |     |       |       |
| Lead-Lag Optimize?      |       |       |       |       |     |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   | 3.0   | 3.0   |     | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max | C-Max | C-Max |     | None  | None  |
| Walk Time (s)           |       |       |       | 7.0   |     | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |       |       | 18.0  |     | 21.0  | 21.0  |
| Pedestrian Calls (#/hr) |       |       |       | 10    |     | 10    | 10    |
| Act Effct Green (s)     |       | 88.3  | 88.3  | 88.3  |     | 13.9  | 13.9  |
| Actuated g/C Ratio      |       | 0.80  | 0.80  | 0.80  |     | 0.13  | 0.13  |
| v/c Ratio               |       | 0.32  | 0.42  | 0.37  |     | 0.34  | 0.27  |
| Control Delay           |       | 16.3  | 13.7  | 5.2   |     | 59.7  | 23.8  |
| Queue Delay             |       | 0.0   | 0.4   | 0.0   |     | 0.0   | 0.0   |
| Total Delay             |       | 16.3  | 14.0  | 5.2   |     | 59.7  | 23.8  |
| LOS                     |       | B     | B     | A     |     | E     | C     |
| Approach Delay          |       |       | 14.3  | 5.2   |     | 42.5  |       |
| Approach LOS            |       |       | B     | A     |     | D     |       |
| Queue Length 50th (m)   |       | 13.9  | 73.0  | 23.5  |     | 15.0  | 3.1   |
| Queue Length 95th (m)   |       | m26.5 | 121.1 | 62.2  |     | m17.3 | m6.8  |
| Internal Link Dist (m)  |       |       | 133.6 | 290.8 |     | 377.6 |       |
| Turn Bay Length (m)     |       | 35.0  |       |       |     | 30.0  |       |
| Base Capacity (vph)     |       | 390   | 2782  | 2750  |     | 443   | 431   |
| Starvation Cap Reductn  |       | 0     | 956   | 0     |     | 0     | 0     |
| Spillback Cap Reductn   |       | 0     | 0     | 0     |     | 0     | 0     |
| Storage Cap Reductn     |       | 0     | 0     | 0     |     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.32  | 0.65  | 0.37  |     | 0.17  | 0.16  |

#### Intersection Summary

|                                                                        |                        |
|------------------------------------------------------------------------|------------------------|
| Area Type:                                                             | Other                  |
| Cycle Length: 110                                                      |                        |
| Actuated Cycle Length: 110                                             |                        |
| Offset: 73 (66%), Referenced to phase 2:EBTL and 6:WBT, Start of Green |                        |
| Natural Cycle: 75                                                      |                        |
| Control Type: Actuated-Coordinated                                     |                        |
| Maximum v/c Ratio: 0.42                                                |                        |
| Intersection Signal Delay: 12.2                                        | Intersection LOS: B    |
| Intersection Capacity Utilization 66.3%                                | ICU Level of Service C |
| Analysis Period (min) 15                                               |                        |
| m Volume for 95th percentile queue is metered by upstream signal.      |                        |

Splits and Phases: 5: Hazeldean & Edgewater

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|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1578                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1138                                                                                |
| Future Volume (vph)        | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1578                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1138                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.887                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                    | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1317                                                                              | 0                                                                                 | 1567                                                                              | 1516                                                                              | 0                                                                                 | 1768                                                                               | 3489                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3402                                                                                |
| Flt Permitted              | 0.693                                                                             |                                                                                   |                                                                                   | 0.755                                                                             |                                                                                   |                                                                                   | 0.228                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.121                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1284                                                                              | 1317                                                                              | 0                                                                                 | 1238                                                                              | 1516                                                                              | 0                                                                                 | 424                                                                                | 3489                                                                                | 0                                                                                   | 0                                                                                   | 221                                                                                 | 3402                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 31                                                                                |                                                                                   |                                                                                    | 3                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                    | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                    | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 33%                                                                               | 14%                                                                               | 50%                                                                               | 3%                                                                                | 1%                                                                                 | 2%                                                                                  | 3%                                                                                  | 1%                                                                                  | 3%                                                                                  | 5%                                                                                  |
| Adj. Flow (vph)            | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                  | 1578                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1138                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 14                                                                                | 4                                                                                 | 0                                                                                 | 14                                                                                | 99                                                                                | 0                                                                                 | 1                                                                                  | 1608                                                                                | 0                                                                                   | 0                                                                                   | 161                                                                                 | 1138                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                    | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 12    |
| Future Volume (vph)        | 12    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1480  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1436  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 35    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 8%    |
| Adj. Flow (vph)            | 12    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 12    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.5                                                                              | 36.5                                                                              |                                                                                   | 36.5                                                                              | 36.5                                                                              |                                                                                   | 34.5                                                                               | 34.5                                                                                |                                                                                     | 34.5                                                                                | 34.5                                                                                | 34.5                                                                                |
| Total Split (s)         | 37.0                                                                              | 37.0                                                                              |                                                                                   | 37.0                                                                              | 37.0                                                                              |                                                                                   | 73.0                                                                               | 73.0                                                                                |                                                                                     | 73.0                                                                                | 73.0                                                                                | 73.0                                                                                |
| Total Split (%)         | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 66.4%                                                                              | 66.4%                                                                               |                                                                                     | 66.4%                                                                               | 66.4%                                                                               | 66.4%                                                                               |
| Maximum Green (s)       | 30.5                                                                              | 30.5                                                                              |                                                                                   | 30.5                                                                              | 30.5                                                                              |                                                                                   | 66.5                                                                               | 66.5                                                                                |                                                                                     | 66.5                                                                                | 66.5                                                                                | 66.5                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 3.2                                                                               | 3.2                                                                               |                                                                                   | 3.2                                                                               | 3.2                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                                | 6.5                                                                                 |                                                                                     |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 21.0                                                                                | 21.0                                                                                | 21.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 14.6                                                                              | 14.6                                                                              |                                                                                   | 14.6                                                                              | 14.6                                                                              |                                                                                   | 82.4                                                                               | 82.4                                                                                |                                                                                     |                                                                                     | 82.4                                                                                | 82.4                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.75                                                                               | 0.75                                                                                |                                                                                     |                                                                                     | 0.75                                                                                | 0.75                                                                                |
| v/c Ratio               | 0.08                                                                              | 0.02                                                                              |                                                                                   | 0.09                                                                              | 0.43                                                                              |                                                                                   | 0.00                                                                               | 0.62                                                                                |                                                                                     |                                                                                     | 0.98                                                                                | 0.45                                                                                |
| Control Delay           | 38.4                                                                              | 25.0                                                                              |                                                                                   | 61.0                                                                              | 55.0                                                                              |                                                                                   | 5.0                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 84.6                                                                                | 6.9                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 38.4                                                                              | 25.0                                                                              |                                                                                   | 61.0                                                                              | 55.0                                                                              |                                                                                   | 5.0                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 84.6                                                                                | 6.9                                                                                 |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | E                                                                                 | D                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | F                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 35.4                                                                              |                                                                                   |                                                                                   | 55.7                                                                              |                                                                                   |                                                                                    | 6.3                                                                                 |                                                                                     |                                                                                     |                                                                                     | 16.4                                                                                |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 2.6                                                                               | 0.2                                                                               |                                                                                   | 3.0                                                                               | 15.8                                                                              |                                                                                   | 0.0                                                                                | 5.2                                                                                 |                                                                                     |                                                                                     | 20.1                                                                                | 30.4                                                                                |
| Queue Length 95th (m)   | 6.6                                                                               | 2.6                                                                               |                                                                                   | m8.7                                                                              | 33.0                                                                              |                                                                                   | m0.1                                                                               | 42.6                                                                                |                                                                                     |                                                                                     | #50.0                                                                               | 80.7                                                                                |
| Internal Link Dist (m)  |                                                                                   | 193.1                                                                             |                                                                                   |                                                                                   | 258.1                                                                             |                                                                                   |                                                                                    | 229.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 336.0                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 65.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |                                                                                     |
| Base Capacity (vph)     | 356                                                                               | 367                                                                               |                                                                                   | 343                                                                               | 442                                                                               |                                                                                   | 317                                                                                | 2614                                                                                |                                                                                     |                                                                                     | 165                                                                                 | 2548                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.04                                                                              | 0.01                                                                              |                                                                                   | 0.04                                                                              | 0.22                                                                              |                                                                                   | 0.00                                                                               | 0.62                                                                                |                                                                                     |                                                                                     | 0.98                                                                                | 0.45                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 16 (15%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 12.7

Intersection LOS: B

Intersection Capacity Utilization 83.6%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 73.0  |
| Total Split (%)         | 66.4% |
| Maximum Green (s)       | 66.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 82.4  |
| Actuated g/C Ratio      | 0.75  |
| v/c Ratio               | 0.01  |
| Control Delay           | 0.2   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.2   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.5   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1084  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |



|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |  |  |                                                                                     |
| Traffic Volume (vph)       | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1434                                                                                | 1                                                                                   | 0                                                                                   | 957                                                                                 | 0                                                                                   |
| Future Volume (vph)        | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1434                                                                                | 1                                                                                   | 0                                                                                   | 957                                                                                 | 0                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 35.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 | 55.0                                                                                |                                                                                     | 0.0                                                                                 |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   |
| Taper Length (m)           | 25.0                                                                              |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     | 50.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.98                                                                              |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1861                                                                              | 1553                                                                              | 0                                                                                 | 1768                                                                              | 1861                                                                              | 0                                                                                 | 1768                                                                               | 3468                                                                                | 0                                                                                   | 1861                                                                                | 3370                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   |                                                                                   |                                                                                   | 0.769                                                                             |                                                                                   |                                                                                   | 0.298                                                                              |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 1861                                                                              | 1553                                                                              | 0                                                                                 | 1422                                                                              | 1861                                                                              | 0                                                                                 | 553                                                                                | 3468                                                                                | 0                                                                                   | 1861                                                                                | 3370                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 150                                                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 207.5                                                                             |                                                                                   |                                                                                   | 88.7                                                                              |                                                                                   |                                                                                    | 316.2                                                                               |                                                                                     |                                                                                     | 253.3                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 14.9                                                                              |                                                                                   |                                                                                   | 10.6                                                                              |                                                                                   |                                                                                    | 16.3                                                                                |                                                                                     |                                                                                     | 13.0                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 3%                                                                                  | 1%                                                                                  | 1%                                                                                  | 6%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 0                                                                                 | 0                                                                                 | 3                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1434                                                                                | 1                                                                                   | 0                                                                                   | 957                                                                                 | 0                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 3                                                                                 | 0                                                                                 | 1                                                                                 | 0                                                                                 | 0                                                                                 | 10                                                                                 | 1435                                                                                | 0                                                                                   | 0                                                                                   | 957                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                               | Left                                                                                | Right                                                                               | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    | 12.0                                                                                |                                                                                     |                                                                                     | 12.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |                                                                                     |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |                                                                                     |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |                                                                                     |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |                                                                                     |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              |                                                                                   |                                                                                   | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | NA                                                                                  |                                                                                     |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                |                                                                                     |
| Minimum Split (s)       | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.5                                                                               | 32.5                                                                                |                                                                                     | 32.5                                                                                | 32.5                                                                                |                                                                                     |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              |                                                                                   | 77.0                                                                               | 77.0                                                                                |                                                                                     | 77.0                                                                                | 77.0                                                                                |                                                                                     |
| Total Split (%)         | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 70.0%                                                                              | 70.0%                                                                               |                                                                                     | 70.0%                                                                               | 70.0%                                                                               |                                                                                     |
| Maximum Green (s)       | 26.8                                                                              | 26.8                                                                              |                                                                                   | 26.8                                                                              | 26.8                                                                              |                                                                                   | 70.5                                                                               | 70.5                                                                                |                                                                                     | 70.5                                                                                | 70.5                                                                                |                                                                                     |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 |                                                                                     |
| All-Red Time (s)        | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 |                                                                                     |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.5                                                                                | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |                                                                                     |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               |                                                                                     |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                               | 19.0                                                                                |                                                                                     | 19.0                                                                                | 19.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 13.2                                                                              |                                                                                   | 13.2                                                                              |                                                                                   |                                                                                   | 102.3                                                                              | 102.3                                                                               |                                                                                     |                                                                                     | 102.3                                                                               |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.93                                                                               | 0.93                                                                                |                                                                                     |                                                                                     | 0.93                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.01                                                                              |                                                                                   | 0.01                                                                              |                                                                                   |                                                                                   | 0.02                                                                               | 0.45                                                                                |                                                                                     |                                                                                     | 0.31                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 0.0                                                                               |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                   | 9.3                                                                                | 9.6                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 0.0                                                                               |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                   | 9.3                                                                                | 9.6                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| LOS                     |                                                                                   | A                                                                                 |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 37.0                                                                              |                                                                                   |                                                                                    | 9.6                                                                                 |                                                                                     |                                                                                     | 0.3                                                                                 |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 0.0                                                                               |                                                                                   | 0.2                                                                               |                                                                                   |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | 0.0                                                                               |                                                                                   | 1.4                                                                               |                                                                                   |                                                                                   | m1.8                                                                               | m157.0                                                                              |                                                                                     |                                                                                     | 1.6                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   | 183.5                                                                             |                                                                                   |                                                                                   | 64.7                                                                              |                                                                                   |                                                                                    | 292.2                                                                               |                                                                                     |                                                                                     | 229.3                                                                               |                                                                                     |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 491                                                                               |                                                                                   | 346                                                                               |                                                                                   |                                                                                   | 514                                                                                | 3224                                                                                |                                                                                     |                                                                                     | 3133                                                                                |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.01                                                                              |                                                                                   | 0.00                                                                              |                                                                                   |                                                                                   | 0.02                                                                               | 0.45                                                                                |                                                                                     |                                                                                     | 0.31                                                                                |                                                                                     |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 26 (24%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.45

Intersection Signal Delay: 5.9

Intersection LOS: A

Intersection Capacity Utilization 62.8%

ICU Level of Service B

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Terry Fox & Tony Graham Rec



8: Terry Fox & Sobey's  
AM Peak Hour

560 Hazeldean Road  
2036 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1400                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 847                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1400                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 847                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 10.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 30.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.91                                                                                | 0.91                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              | 0.98                                                                              | 1.00                                                                               | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.910                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.995                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.997                                                                               |
| Flt Protected              |                                                                                   | 0.986                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1526                                                                              | 0                                                                                 | 0                                                                                 | 1742                                                                              | 1567                                                                              | 1581                                                                               | 5048                                                                                | 0                                                                                   | 0                                                                                   | 1722                                                                                | 3424                                                                                |
| Flt Permitted              |                                                                                   | 0.899                                                                             |                                                                                   |                                                                                   | 0.715                                                                             |                                                                                   | 0.278                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.171                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1389                                                                              | 0                                                                                 | 0                                                                                 | 1297                                                                              | 1537                                                                              | 462                                                                                | 5048                                                                                | 0                                                                                   | 0                                                                                   | 309                                                                                 | 3424                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 16                                                                                |                                                                                   |                                                                                   |                                                                                   | 109                                                                               |                                                                                    | 9                                                                                   |                                                                                     |                                                                                     |                                                                                     | 3                                                                                   |
| Link Speed (k/h)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 132.0                                                                             |                                                                                   |                                                                                   | 152.6                                                                             |                                                                                   |                                                                                    | 140.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 142.7                                                                               |
| Travel Time (s)            |                                                                                   | 15.8                                                                              |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                    | 7.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.3                                                                                 |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     | 1                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 29%                                                                               | 1%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 13%                                                                                | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  | 4%                                                                                  | 4%                                                                                  |
| Adj. Flow (vph)            | 7                                                                                 | 1                                                                                 | 16                                                                                | 30                                                                                | 1                                                                                 | 52                                                                                | 8                                                                                  | 1400                                                                                | 52                                                                                  | 3                                                                                   | 28                                                                                  | 847                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 24                                                                                | 0                                                                                 | 0                                                                                 | 31                                                                                | 52                                                                                | 8                                                                                  | 1452                                                                                | 0                                                                                   | 0                                                                                   | 31                                                                                  | 865                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | pm+pt                                                                              | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 5                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |

|                            |      |    |
|----------------------------|------|----|
| Lane Group                 | SBR  | Ø9 |
| Lane Configurations        |      |    |
| Traffic Volume (vph)       | 18   |    |
| Future Volume (vph)        | 18   |    |
| Ideal Flow (vphpl)         | 1800 |    |
| Storage Length (m)         | 0.0  |    |
| Storage Lanes              | 0    |    |
| Taper Length (m)           |      |    |
| Lane Util. Factor          | 0.95 |    |
| Ped Bike Factor            |      |    |
| Frt                        |      |    |
| Flt Protected              |      |    |
| Satd. Flow (prot)          | 0    |    |
| Flt Permitted              |      |    |
| Satd. Flow (perm)          | 0    |    |
| Right Turn on Red          | Yes  |    |
| Satd. Flow (RTOR)          |      |    |
| Link Speed (k/h)           |      |    |
| Link Distance (m)          |      |    |
| Travel Time (s)            |      |    |
| Confl. Peds. (#/hr)        | 5    |    |
| Confl. Bikes (#/hr)        |      |    |
| Peak Hour Factor           | 1.00 |    |
| Heavy Vehicles (%)         | 1%   |    |
| Adj. Flow (vph)            | 18   |    |
| Shared Lane Traffic (%)    |      |    |
| Lane Group Flow (vph)      | 0    |    |
| Enter Blocked Intersection | No   |    |
| Lane Alignment             | R NA |    |
| Median Width(m)            |      |    |
| Link Offset(m)             |      |    |
| Crosswalk Width(m)         |      |    |
| Two way Left Turn Lane     |      |    |
| Headway Factor             | 1.01 |    |
| Turning Speed (k/h)        | 14   |    |
| Number of Detectors        |      |    |
| Detector Template          |      |    |
| Leading Detector (m)       |      |    |
| Trailing Detector (m)      |      |    |
| Detector 1 Position(m)     |      |    |
| Detector 1 Size(m)         |      |    |
| Detector 1 Type            |      |    |
| Detector 1 Channel         |      |    |
| Detector 1 Extend (s)      |      |    |
| Detector 1 Queue (s)       |      |    |
| Detector 1 Delay (s)       |      |    |
| Detector 2 Position(m)     |      |    |
| Detector 2 Size(m)         |      |    |
| Detector 2 Type            |      |    |
| Detector 2 Channel         |      |    |
| Detector 2 Extend (s)      |      |    |
| Turn Type                  |      |    |
| Protected Phases           | 9    |    |
| Permitted Phases           |      |    |
| Detector Phase             |      |    |

8: Terry Fox & Sobey's  
AM Peak Hour

560 Hazeldean Road  
2036 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 5.0                                                                                | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 11.2                                                                               | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                | 26.0                                                                                |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              | 33.0                                                                              | 15.0                                                                               | 72.0                                                                                |                                                                                     | 57.0                                                                                | 57.0                                                                                | 57.0                                                                                |
| Total Split (%)         | 30.0%                                                                             | 30.0%                                                                             |                                                                                   | 30.0%                                                                             | 30.0%                                                                             | 30.0%                                                                             | 13.6%                                                                              | 65.5%                                                                               |                                                                                     | 51.8%                                                                               | 51.8%                                                                               | 51.8%                                                                               |
| Maximum Green (s)       | 26.0                                                                              | 26.0                                                                              |                                                                                   | 26.0                                                                              | 26.0                                                                              | 26.0                                                                              | 9.0                                                                                | 66.0                                                                                |                                                                                     | 51.0                                                                                | 51.0                                                                                | 51.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 1.8                                                                                | 1.8                                                                                 |                                                                                     | 1.8                                                                                 | 1.8                                                                                 | 1.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               | 6.0                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 6.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               |                                                                                     |                                                                                     | Lag                                                                                 | Lag                                                                                 | Lag                                                                                 |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | None                                                                               | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               |                                                                                    | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 17.0                                                                              | 17.0                                                                              |                                                                                   | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              |                                                                                    | 13.0                                                                                |                                                                                     | 13.0                                                                                | 13.0                                                                                | 13.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 |                                                                                    | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 12.8                                                                              |                                                                                   |                                                                                   | 12.8                                                                              | 12.8                                                                              | 82.6                                                                               | 82.6                                                                                |                                                                                     |                                                                                     | 80.2                                                                                | 80.2                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.12                                                                              | 0.12                                                                              | 0.75                                                                               | 0.75                                                                                |                                                                                     |                                                                                     | 0.73                                                                                | 0.73                                                                                |
| v/c Ratio               |                                                                                   | 0.14                                                                              |                                                                                   |                                                                                   | 0.21                                                                              | 0.19                                                                              | 0.02                                                                               | 0.38                                                                                |                                                                                     |                                                                                     | 0.14                                                                                | 0.35                                                                                |
| Control Delay           |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              | 1.5                                                                               | 2.6                                                                                | 4.1                                                                                 |                                                                                     |                                                                                     | 4.6                                                                                 | 2.8                                                                                 |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.1                                                                                 |
| Total Delay             |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              | 1.5                                                                               | 2.6                                                                                | 4.1                                                                                 |                                                                                     |                                                                                     | 4.6                                                                                 | 2.8                                                                                 |
| LOS                     |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 | A                                                                                 | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 17.8                                                                              |                                                                                   |                                                                                    | 4.1                                                                                 |                                                                                     |                                                                                     |                                                                                     | 2.9                                                                                 |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 1.5                                                                               |                                                                                   |                                                                                   | 5.8                                                                               | 0.0                                                                               | 0.3                                                                                | 43.8                                                                                |                                                                                     |                                                                                     | 0.4                                                                                 | 5.3                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 7.6                                                                               |                                                                                   |                                                                                   | 12.4                                                                              | 0.0                                                                               | m0.3                                                                               | 27.3                                                                                |                                                                                     |                                                                                     | m2.1                                                                                | 19.1                                                                                |
| Internal Link Dist (m)  |                                                                                   | 108.0                                                                             |                                                                                   |                                                                                   | 128.6                                                                             |                                                                                   |                                                                                    | 116.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 118.7                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 340                                                                               |                                                                                   |                                                                                   | 306                                                                               | 446                                                                               | 438                                                                                | 3793                                                                                |                                                                                     |                                                                                     | 225                                                                                 | 2496                                                                                |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 356                                                                                 |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.07                                                                              |                                                                                   |                                                                                   | 0.10                                                                              | 0.12                                                                              | 0.02                                                                               | 0.38                                                                                |                                                                                     |                                                                                     | 0.14                                                                                | 0.40                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 80 (73%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 4.3

Intersection LOS: A

Intersection Capacity Utilization 66.7%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Terry Fox & Sobey's





| Lane Group              | SBR | Ø9  |
|-------------------------|-----|-----|
| Switch Phase            |     |     |
| Minimum Initial (s)     |     | 3.0 |
| Minimum Split (s)       |     | 5.0 |
| Total Split (s)         |     | 5.0 |
| Total Split (%)         |     | 5%  |
| Maximum Green (s)       |     | 3.0 |
| Yellow Time (s)         |     | 2.0 |
| All-Red Time (s)        |     | 0.0 |
| Lost Time Adjust (s)    |     |     |
| Total Lost Time (s)     |     |     |
| Lead/Lag                |     |     |
| Lead-Lag Optimize?      |     |     |
| Vehicle Extension (s)   |     | 3.0 |
| Recall Mode             |     | Max |
| Walk Time (s)           |     |     |
| Flash Dont Walk (s)     |     |     |
| Pedestrian Calls (#/hr) |     |     |
| Act Effct Green (s)     |     |     |
| Actuated g/C Ratio      |     |     |
| v/c Ratio               |     |     |
| Control Delay           |     |     |
| Queue Delay             |     |     |
| Total Delay             |     |     |
| LOS                     |     |     |
| Approach Delay          |     |     |
| Approach LOS            |     |     |
| Queue Length 50th (m)   |     |     |
| Queue Length 95th (m)   |     |     |
| Internal Link Dist (m)  |     |     |
| Turn Bay Length (m)     |     |     |
| Base Capacity (vph)     |     |     |
| Starvation Cap Reductn  |     |     |
| Spillback Cap Reductn   |     |     |
| Storage Cap Reductn     |     |     |
| Reduced v/c Ratio       |     |     |
| Intersection Summary    |     |     |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |   |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                   | 1388                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 781                                                                                 |
| Future Volume (vph)        | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                   | 1388                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 781                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 15.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 65.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 120.0                                                                               |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 20.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                                | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.910                                                                             |                                                                                   |                                                                                   | 0.857                                                                             |                                                                                   |                                                                                     | 0.996                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1462                                                                              | 0                                                                                 | 1734                                                                              | 1555                                                                              | 0                                                                                 | 1069                                                                                | 3484                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3435                                                                                |
| Flt Permitted              | 0.689                                                                             |                                                                                   |                                                                                   | 0.741                                                                             |                                                                                   |                                                                                   | 0.349                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.158                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1276                                                                              | 1462                                                                              | 0                                                                                 | 1345                                                                              | 1555                                                                              | 0                                                                                 | 391                                                                                 | 3484                                                                                | 0                                                                                   | 0                                                                                   | 294                                                                                 | 3435                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 15                                                                                |                                                                                   |                                                                                   | 44                                                                                |                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 40                                                                                |                                                                                   |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 65.4                                                                              |                                                                                   |                                                                                   | 381.2                                                                             |                                                                                   |                                                                                     | 479.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 200.7                                                                               |
| Travel Time (s)            |                                                                                   | 4.7                                                                               |                                                                                   |                                                                                   | 34.3                                                                              |                                                                                   |                                                                                     | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     | 10.3                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                   |                                                                                     | 10                                                                                  |                                                                                     | 10                                                                                  |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 20%                                                                               | 13%                                                                               | 3%                                                                                | 20%                                                                               | 1%                                                                                | 67%                                                                                 | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 4%                                                                                  |
| Adj. Flow (vph)            | 20                                                                                | 10                                                                                | 15                                                                                | 30                                                                                | 5                                                                                 | 101                                                                               | 6                                                                                   | 1388                                                                                | 41                                                                                  | 1                                                                                   | 76                                                                                  | 781                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 20                                                                                | 25                                                                                | 0                                                                                 | 30                                                                                | 106                                                                               | 0                                                                                 | 6                                                                                   | 1429                                                                                | 0                                                                                   | 0                                                                                   | 77                                                                                  | 781                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                                | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                               | CI+Ex                                                                               |                                                                                     | CI+Ex                                                                               | CI+Ex                                                                               | CI+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                     | CI+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | CI+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        |       |
| Traffic Volume (vph)       | 10    |
| Future Volume (vph)        | 10    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 55.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1531  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 30    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 10    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 10    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | Cl+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |



|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 28.3                                                                               | 28.3                                                                                |                                                                                     | 28.3                                                                                | 28.3                                                                                | 28.3                                                                                |
| Total Split (s)         | 38.0                                                                              | 38.0                                                                              |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 72.0                                                                               | 72.0                                                                                |                                                                                     | 72.0                                                                                | 72.0                                                                                | 72.0                                                                                |
| Total Split (%)         | 34.5%                                                                             | 34.5%                                                                             |                                                                                   | 34.5%                                                                             | 34.5%                                                                             |                                                                                   | 65.5%                                                                              | 65.5%                                                                               |                                                                                     | 65.5%                                                                               | 65.5%                                                                               | 65.5%                                                                               |
| Maximum Green (s)       | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 65.7                                                                               | 65.7                                                                                |                                                                                     | 65.7                                                                                | 65.7                                                                                | 65.7                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.1                                                                                | 2.1                                                                                 |                                                                                     | 2.1                                                                                 | 2.1                                                                                 | 2.1                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.3                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 15.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 10                                                                                 | 10                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 14.4                                                                              | 14.4                                                                              |                                                                                   | 14.4                                                                              | 14.4                                                                              |                                                                                   | 83.3                                                                               | 83.3                                                                                |                                                                                     |                                                                                     | 83.3                                                                                | 83.3                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.76                                                                               | 0.76                                                                                |                                                                                     |                                                                                     | 0.76                                                                                | 0.76                                                                                |
| v/c Ratio               | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.17                                                                              | 0.44                                                                              |                                                                                   | 0.02                                                                               | 0.54                                                                                |                                                                                     |                                                                                     | 0.35                                                                                | 0.30                                                                                |
| Control Delay           | 39.7                                                                              | 23.0                                                                              |                                                                                   | 41.2                                                                              | 30.4                                                                              |                                                                                   | 6.2                                                                                | 7.6                                                                                 |                                                                                     |                                                                                     | 23.4                                                                                | 12.3                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 39.7                                                                              | 23.0                                                                              |                                                                                   | 41.2                                                                              | 30.4                                                                              |                                                                                   | 6.2                                                                                | 7.6                                                                                 |                                                                                     |                                                                                     | 23.4                                                                                | 12.3                                                                                |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | C                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 30.4                                                                              |                                                                                   |                                                                                   | 32.8                                                                              |                                                                                   |                                                                                    | 7.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 13.2                                                                                |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 3.7                                                                               | 1.9                                                                               |                                                                                   | 5.6                                                                               | 11.8                                                                              |                                                                                   | 0.2                                                                                | 40.3                                                                                |                                                                                     |                                                                                     | 7.4                                                                                 | 39.4                                                                                |
| Queue Length 95th (m)   | 8.4                                                                               | 7.5                                                                               |                                                                                   | 11.3                                                                              | 22.1                                                                              |                                                                                   | 2.0                                                                                | 110.5                                                                               |                                                                                     |                                                                                     | 23.6                                                                                | 71.9                                                                                |
| Internal Link Dist (m)  |                                                                                   | 41.4                                                                              |                                                                                   |                                                                                   | 357.2                                                                             |                                                                                   |                                                                                    | 455.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 176.7                                                                               |
| Turn Bay Length (m)     | 15.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 120.0                                                                               |                                                                                     |
| Base Capacity (vph)     | 371                                                                               | 435                                                                               |                                                                                   | 391                                                                               | 483                                                                               |                                                                                   | 295                                                                                | 2638                                                                                |                                                                                     |                                                                                     | 222                                                                                 | 2600                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.05                                                                              | 0.06                                                                              |                                                                                   | 0.08                                                                              | 0.22                                                                              |                                                                                   | 0.02                                                                               | 0.54                                                                                |                                                                                     |                                                                                     | 0.35                                                                                | 0.30                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 40 (36%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 11.3

Intersection LOS: B

Intersection Capacity Utilization 76.7%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Terry Fox & Halkirk/Winchester





|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 28.3  |
| Total Split (s)         | 72.0  |
| Total Split (%)         | 65.5% |
| Maximum Green (s)       | 65.7  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.1   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.3   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 15.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 83.3  |
| Actuated g/C Ratio      | 0.76  |
| v/c Ratio               | 0.01  |
| Control Delay           | 6.3   |
| Queue Delay             | 0.0   |
| Total Delay             | 6.3   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.1   |
| Queue Length 95th (m)   | m1.0  |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 55.0  |
| Base Capacity (vph)     | 1166  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |

|                                         |  |  |  |  |  |  |
|-----------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                              | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | NBL                                                                               | NBR                                                                               |
| Lane Configurations                     |  |                                                                                   |  |  |  |                                                                                   |
| Traffic Volume (vph)                    | 1241                                                                              | 4                                                                                 | 16                                                                                | 973                                                                               | 8                                                                                 | 37                                                                                |
| Future Volume (vph)                     | 1241                                                                              | 4                                                                                 | 16                                                                                | 973                                                                               | 8                                                                                 | 37                                                                                |
| Ideal Flow (vphpl)                      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)                      |                                                                                   | 0.0                                                                               | 85.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                               |
| Storage Lanes                           |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |
| Taper Length (m)                        |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   | 10.0                                                                              |                                                                                   |
| Lane Util. Factor                       | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              |
| Ped Bike Factor                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Frt                                     |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 0.889                                                                             |                                                                                   |
| Flt Protected                           |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   | 0.991                                                                             |                                                                                   |
| Satd. Flow (prot)                       | 3502                                                                              | 0                                                                                 | 1751                                                                              | 3502                                                                              | 1624                                                                              | 0                                                                                 |
| Flt Permitted                           |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   | 0.991                                                                             |                                                                                   |
| Satd. Flow (perm)                       | 3502                                                                              | 0                                                                                 | 1751                                                                              | 3502                                                                              | 1624                                                                              | 0                                                                                 |
| Link Speed (k/h)                        | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                | 50                                                                                |                                                                                   |
| Link Distance (m)                       | 150.7                                                                             |                                                                                   |                                                                                   | 644.5                                                                             | 279.6                                                                             |                                                                                   |
| Travel Time (s)                         | 10.9                                                                              |                                                                                   |                                                                                   | 46.4                                                                              | 20.1                                                                              |                                                                                   |
| Confl. Peds. (#/hr)                     |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Peak Hour Factor                        | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Adj. Flow (vph)                         | 1241                                                                              | 4                                                                                 | 16                                                                                | 973                                                                               | 8                                                                                 | 37                                                                                |
| Shared Lane Traffic (%)                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)                   | 1245                                                                              | 0                                                                                 | 16                                                                                | 973                                                                               | 45                                                                                | 0                                                                                 |
| Enter Blocked Intersection              | No                                                                                | No                                                                                | Yes                                                                               | Yes                                                                               | No                                                                                | No                                                                                |
| Lane Alignment                          | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)                         | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               | 4.0                                                                               |                                                                                   |
| Link Offset(m)                          | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)                      | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor                          | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)                     |                                                                                   | 97                                                                                | 97                                                                                |                                                                                   | 97                                                                                | 97                                                                                |
| Sign Control                            | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              | Stop                                                                              |                                                                                   |
| Intersection Summary                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Area Type:                              | Other                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Control Type:                           | Unsignalized                                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization 46.3% | ICU Level of Service A                                                            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Analysis Period (min) 15                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 340                                                                               | 1209                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1601                                                                               | 122                                                                                 | 21                                                                                  | 304                                                                                 | 136                                                                                 | 160                                                                                 |
| Future Volume (vph)        | 2                                                                                 | 340                                                                               | 1209                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1601                                                                               | 122                                                                                 | 21                                                                                  | 304                                                                                 | 136                                                                                 | 160                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                    | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                    |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 0.99                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3537                                                                               | 1582                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3427                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3391                                                                              | 3537                                                                               | 1555                                                                                | 1746                                                                                | 3502                                                                                | 1539                                                                                | 3410                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 128                                                                                 |                                                                                     |                                                                                     | 133                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                              |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                               |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 1%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 340                                                                               | 1209                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1601                                                                               | 122                                                                                 | 21                                                                                  | 304                                                                                 | 136                                                                                 | 160                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 342                                                                               | 1231                                                                              | 0                                                                                 | 0                                                                                 | 185                                                                               | 1601                                                                               | 122                                                                                 | 21                                                                                  | 304                                                                                 | 136                                                                                 | 160                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 97                                                                                | 14                                                                                | 97                                                                                |                                                                                    | 14                                                                                  | 97                                                                                  |                                                                                     | 97                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                  |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                  | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 493   | 440   |
| Future Volume (vph)        | 493   | 440   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 60.0  |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3502  | 1582  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3502  | 1555  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 171   |
| Link Speed (k/h)           | 50    |       |
| Link Distance (m)          | 251.2 |       |
| Travel Time (s)            | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 2%    | 1%    |
| Adj. Flow (vph)            | 493   | 440   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 493   | 440   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | R NA  |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 4     |       |
| Permitted Phases           |       | 4     |
| Detector Phase             | 4     | 4     |
| Switch Phase               |       |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 61.0                                                                              |                                                                                   | 15.0                                                                              | 15.0                                                                              | 60.0                                                                                | 60.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 12.3%                                                                             | 12.3%                                                                             | 46.9%                                                                             |                                                                                   | 11.5%                                                                             | 11.5%                                                                             | 46.2%                                                                               | 46.2%                                                                               | 9.2%                                                                                | 32.3%                                                                               | 32.3%                                                                               | 9.2%                                                                                |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 54.9                                                                              |                                                                                   | 8.9                                                                               | 8.9                                                                               | 53.9                                                                                | 53.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                 | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                               | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                                | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 17.5                                                                              | 63.2                                                                              |                                                                                   |                                                                                   | 10.2                                                                              | 55.9                                                                                | 55.9                                                                                | 5.8                                                                                 | 26.3                                                                                | 26.3                                                                                | 5.9                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.13                                                                              | 0.49                                                                              |                                                                                   |                                                                                   | 0.08                                                                              | 0.43                                                                                | 0.43                                                                                | 0.04                                                                                | 0.20                                                                                | 0.20                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.74                                                                              | 0.72                                                                              |                                                                                   |                                                                                   | 0.70                                                                              | 1.05                                                                                | 0.16                                                                                | 0.27                                                                                | 0.43                                                                                | 0.33                                                                                | 1.03                                                                                |
| Control Delay           |                                                                                   | 65.3                                                                              | 31.6                                                                              |                                                                                   |                                                                                   | 85.6                                                                              | 63.4                                                                                | 1.9                                                                                 | 68.8                                                                                | 45.5                                                                                | 8.4                                                                                 | 140.6                                                                               |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 65.3                                                                              | 31.6                                                                              |                                                                                   |                                                                                   | 85.6                                                                              | 63.4                                                                                | 1.9                                                                                 | 68.8                                                                                | 45.5                                                                                | 8.4                                                                                 | 140.6                                                                               |
| LOS                     |                                                                                   | E                                                                                 | C                                                                                 |                                                                                   |                                                                                   | F                                                                                 | E                                                                                   | A                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   | F                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 38.9                                                                              |                                                                                   |                                                                                   |                                                                                   | 61.6                                                                                |                                                                                     |                                                                                     | 35.6                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | E                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 42.1                                                                              | 134.3                                                                             |                                                                                   |                                                                                   | 19.5                                                                              | ~229.9                                                                              | 4.8                                                                                 | 4.9                                                                                 | 31.1                                                                                | 0.5                                                                                 | ~20.7                                                                               |
| Queue Length 95th (m)   |                                                                                   | #81.1                                                                             | 161.5                                                                             |                                                                                   |                                                                                   | m#37.2                                                                            | #259.2                                                                              | m2.6                                                                                | 13.1                                                                                | 41.8                                                                                | 14.5                                                                                | #41.4                                                                               |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                               |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 461                                                                               | 1698                                                                              |                                                                                   |                                                                                   | 265                                                                               | 1520                                                                                | 741                                                                                 | 79                                                                                  | 967                                                                                 | 521                                                                                 | 155                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.74                                                                              | 0.72                                                                              |                                                                                   |                                                                                   | 0.70                                                                              | 1.05                                                                                | 0.16                                                                                | 0.27                                                                                | 0.31                                                                                | 0.26                                                                                | 1.03                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 15 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 145

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 51.9

Intersection LOS: D

Intersection Capacity Utilization 110.8%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

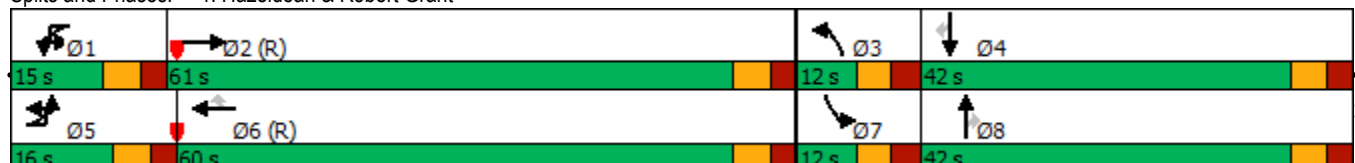
Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Hazeldean & Robert Grant





| Lane Group              | SBT   | SBR    |
|-------------------------|-------|--------|
| Minimum Initial (s)     | 10.0  | 10.0   |
| Minimum Split (s)       | 41.1  | 41.1   |
| Total Split (s)         | 42.0  | 42.0   |
| Total Split (%)         | 32.3% | 32.3%  |
| Maximum Green (s)       | 35.9  | 35.9   |
| Yellow Time (s)         | 3.3   | 3.3    |
| All-Red Time (s)        | 2.8   | 2.8    |
| Lost Time Adjust (s)    | 0.0   | 0.0    |
| Total Lost Time (s)     | 6.1   | 6.1    |
| Lead/Lag                | Lag   | Lag    |
| Lead-Lag Optimize?      |       |        |
| Vehicle Extension (s)   | 3.0   | 3.0    |
| Recall Mode             | None  | None   |
| Walk Time (s)           | 7.0   | 7.0    |
| Flash Dont Walk (s)     | 28.0  | 28.0   |
| Pedestrian Calls (#/hr) | 5     | 5      |
| Act Effct Green (s)     | 31.1  | 31.1   |
| Actuated g/C Ratio      | 0.24  | 0.24   |
| v/c Ratio               | 0.59  | 0.88   |
| Control Delay           | 46.3  | 47.4   |
| Queue Delay             | 0.0   | 0.0    |
| Total Delay             | 46.3  | 47.4   |
| LOS                     | D     | D      |
| Approach Delay          | 60.5  |        |
| Approach LOS            | E     |        |
| Queue Length 50th (m)   | 53.6  | 63.9   |
| Queue Length 95th (m)   | 67.5  | #103.8 |
| Internal Link Dist (m)  | 227.2 |        |
| Turn Bay Length (m)     |       | 60.0   |
| Base Capacity (vph)     | 967   | 553    |
| Starvation Cap Reductn  | 0     | 0      |
| Spillback Cap Reductn   | 0     | 0      |
| Storage Cap Reductn     | 0     | 0      |
| Reduced v/c Ratio       | 0.51  | 0.80   |
| Intersection Summary    |       |        |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |  |
| Traffic Volume (vph)       | 166                                                                               | 1322                                                                              | 104                                                                               | 52                                                                                | 1580                                                                              | 61                                                                                | 102                                                                                | 0                                                                                   | 39                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Future Volume (vph)        | 166                                                                               | 1322                                                                              | 104                                                                               | 52                                                                                | 1580                                                                              | 61                                                                                | 102                                                                                | 0                                                                                   | 39                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 75.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 180.0                                                                             | 0.0                                                                                |                                                                                     | 0.0                                                                                 | 40.0                                                                                |                                                                                     | 40.0                                                                                |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 1.00                                                                              |                                                                                   | 0.97                                                                              | 0.99                                                                               | 0.98                                                                                |                                                                                     | 0.99                                                                                |                                                                                     | 0.98                                                                                |
| Frt                        |                                                                                   | 0.989                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.850                                                                               |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 3487                                                                              | 0                                                                                 | 1751                                                                              | 3502                                                                              | 1582                                                                              | 1751                                                                               | 1536                                                                                | 0                                                                                   | 1768                                                                                | 1843                                                                                | 1582                                                                                |
| Flt Permitted              | 0.089                                                                             |                                                                                   |                                                                                   | 0.187                                                                             |                                                                                   |                                                                                   | 0.757                                                                              |                                                                                     |                                                                                     | 0.732                                                                               |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 166                                                                               | 3487                                                                              | 0                                                                                 | 344                                                                               | 3502                                                                              | 1530                                                                              | 1384                                                                               | 1536                                                                                | 0                                                                                   | 1352                                                                                | 1843                                                                                | 1551                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |
| Satd. Flow (RTOR)          |                                                                                   | 15                                                                                |                                                                                   |                                                                                   |                                                                                   | 79                                                                                |                                                                                    | 86                                                                                  |                                                                                     |                                                                                     |                                                                                     | 195                                                                                 |
| Link Speed (k/h)           |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                    | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |
| Link Distance (m)          |                                                                                   | 297.5                                                                             |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                    | 259.5                                                                               |                                                                                     |                                                                                     | 237.4                                                                               |                                                                                     |
| Travel Time (s)            |                                                                                   | 17.9                                                                              |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                    | 18.7                                                                                |                                                                                     |                                                                                     | 17.1                                                                                |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                 | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 166                                                                               | 1322                                                                              | 104                                                                               | 52                                                                                | 1580                                                                              | 61                                                                                | 102                                                                                | 0                                                                                   | 39                                                                                  | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 166                                                                               | 1426                                                                              | 0                                                                                 | 52                                                                                | 1580                                                                              | 61                                                                                | 102                                                                                | 39                                                                                  | 0                                                                                   | 94                                                                                  | 0                                                                                   | 70                                                                                  |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                    | 4.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 97                                                                                | 97                                                                                |                                                                                   | 14                                                                                | 97                                                                                 |                                                                                     | 97                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                | Right                                                                               |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |
| Turn Type                  | pm+pt                                                                             | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                |                                                                                     | Perm                                                                                |
| Protected Phases           | 5                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     |
| Permitted Phases           | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                 | 8                                                                                  |                                                                                     |                                                                                     | 4                                                                                   |                                                                                     | 4                                                                                   |
| Detector Phase             | 5                                                                                 | 2                                                                                 |                                                                                   | 6                                                                                 | 6                                                                                 | 6                                                                                 | 8                                                                                  | 8                                                                                   |                                                                                     | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 11.2                                                                              | 31.3                                                                              |                                                                                   | 31.3                                                                              | 31.3                                                                              | 31.3                                                                              | 31.2                                                                               | 31.2                                                                                |                                                                                     | 31.2                                                                                | 31.2                                                                                | 31.2                                                                                |
| Total Split (s)         | 20.0                                                                              | 97.0                                                                              |                                                                                   | 77.0                                                                              | 77.0                                                                              | 77.0                                                                              | 33.0                                                                               | 33.0                                                                                |                                                                                     | 33.0                                                                                | 33.0                                                                                | 33.0                                                                                |
| Total Split (%)         | 15.4%                                                                             | 74.6%                                                                             |                                                                                   | 59.2%                                                                             | 59.2%                                                                             | 59.2%                                                                             | 25.4%                                                                              | 25.4%                                                                               |                                                                                     | 25.4%                                                                               | 25.4%                                                                               | 25.4%                                                                               |
| Maximum Green (s)       | 13.8                                                                              | 90.7                                                                              |                                                                                   | 70.7                                                                              | 70.7                                                                              | 70.7                                                                              | 26.8                                                                               | 26.8                                                                                |                                                                                     | 26.8                                                                                | 26.8                                                                                | 26.8                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.3                                                                                | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.5                                                                               | 2.6                                                                               |                                                                                   | 2.6                                                                               | 2.6                                                                               | 2.6                                                                               | 2.9                                                                                | 2.9                                                                                 |                                                                                     | 2.9                                                                                 | 2.9                                                                                 | 2.9                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.2                                                                               | 6.3                                                                               |                                                                                   | 6.3                                                                               | 6.3                                                                               | 6.3                                                                               | 6.2                                                                                | 6.2                                                                                 |                                                                                     | 6.2                                                                                 | 6.2                                                                                 | 6.2                                                                                 |
| Lead/Lag                | Lead                                                                              |                                                                                   |                                                                                   | Lag                                                                               |                                                                                   |                                                                                   | Lag                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | C-Max                                                                             |                                                                                   | C-Max                                                                             | C-Max                                                                             | C-Max                                                                             | None                                                                               | None                                                                                |                                                                                     | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   | 18.0                                                                              |                                                                                   | 18.0                                                                              | 18.0                                                                              | 18.0                                                                              | 18.0                                                                               | 18.0                                                                                |                                                                                     | 18.0                                                                                | 18.0                                                                                | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   | 5                                                                                   |
| Act Effct Green (s)     | 101.7                                                                             | 101.6                                                                             |                                                                                   | 83.6                                                                              | 83.6                                                                              | 83.6                                                                              | 15.9                                                                               | 15.9                                                                                |                                                                                     | 15.9                                                                                |                                                                                     | 15.9                                                                                |
| Actuated g/C Ratio      | 0.78                                                                              | 0.78                                                                              |                                                                                   | 0.64                                                                              | 0.64                                                                              | 0.64                                                                              | 0.12                                                                               | 0.12                                                                                |                                                                                     | 0.12                                                                                |                                                                                     | 0.12                                                                                |
| v/c Ratio               | 0.61                                                                              | 0.52                                                                              |                                                                                   | 0.24                                                                              | 0.70                                                                              | 0.06                                                                              | 0.60                                                                               | 0.15                                                                                |                                                                                     | 0.57                                                                                |                                                                                     | 0.19                                                                                |
| Control Delay           | 26.3                                                                              | 12.1                                                                              |                                                                                   | 3.6                                                                               | 8.5                                                                               | 0.2                                                                               | 67.6                                                                               | 1.2                                                                                 |                                                                                     | 65.8                                                                                |                                                                                     | 1.2                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |
| Total Delay             | 26.3                                                                              | 12.1                                                                              |                                                                                   | 3.6                                                                               | 8.5                                                                               | 0.2                                                                               | 67.6                                                                               | 1.2                                                                                 |                                                                                     | 65.8                                                                                |                                                                                     | 1.2                                                                                 |
| LOS                     | C                                                                                 | B                                                                                 |                                                                                   | A                                                                                 | A                                                                                 | A                                                                                 | E                                                                                  | A                                                                                   |                                                                                     | E                                                                                   |                                                                                     | A                                                                                   |
| Approach Delay          |                                                                                   | 13.6                                                                              |                                                                                   |                                                                                   | 8.0                                                                               |                                                                                   |                                                                                    | 49.3                                                                                |                                                                                     |                                                                                     | 38.3                                                                                |                                                                                     |
| Approach LOS            |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                    | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |
| Queue Length 50th (m)   | 26.0                                                                              | 101.1                                                                             |                                                                                   | 0.7                                                                               | 159.0                                                                             | 0.0                                                                               | 23.4                                                                               | 0.0                                                                                 |                                                                                     | 21.5                                                                                |                                                                                     | 0.0                                                                                 |
| Queue Length 95th (m)   | m44.6                                                                             | m129.6                                                                            |                                                                                   | m0.8                                                                              | 222.9                                                                             | m0.0                                                                              | 37.4                                                                               | 0.0                                                                                 |                                                                                     | 34.9                                                                                |                                                                                     | 0.0                                                                                 |
| Internal Link Dist (m)  |                                                                                   | 273.5                                                                             |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                    | 235.5                                                                               |                                                                                     |                                                                                     | 213.4                                                                               |                                                                                     |
| Turn Bay Length (m)     | 75.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 180.0                                                                             |                                                                                    |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     | 40.0                                                                                |
| Base Capacity (vph)     | 307                                                                               | 2727                                                                              |                                                                                   | 221                                                                               | 2252                                                                              | 1012                                                                              | 285                                                                                | 384                                                                                 |                                                                                     | 278                                                                                 |                                                                                     | 474                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       | 0.54                                                                              | 0.52                                                                              |                                                                                   | 0.24                                                                              | 0.70                                                                              | 0.06                                                                              | 0.36                                                                               | 0.10                                                                                |                                                                                     | 0.34                                                                                |                                                                                     | 0.15                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 114 (88%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 13.5

Intersection LOS: B

Intersection Capacity Utilization 85.3%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Hazeldean & Roger Griffiths



|                            |  |  |  |  |  |  |   |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |  |  |  |  |  |                                                                                     |  |  |
| Traffic Volume (vph)       | 1                                                                                 | 82                                                                                | 1215                                                                              | 33                                                                                | 89                                                                                | 1532                                                                              | 212                                                                                 | 26                                                                                  | 2                                                                                   | 43                                                                                  | 177                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 1                                                                                 | 82                                                                                | 1215                                                                              | 33                                                                                | 89                                                                                | 1532                                                                              | 212                                                                                 | 26                                                                                  | 2                                                                                   | 43                                                                                  | 177                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 80.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                              |                                                                                   | 105.0                                                                               | 55.0                                                                                |                                                                                     | 0.0                                                                                 | 35.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                   | 1                                                                                   |                                                                                     | 0                                                                                   | 2                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 60.0                                                                              |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                   |                                                                                     | 35.0                                                                                |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 0.97                                                                                | 1.00                                                                                |
| Ped Bike Factor            |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                   |                                                                                   |                                                                                   | 0.95                                                                                | 0.99                                                                                | 0.98                                                                                |                                                                                     | 0.99                                                                                | 0.98                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.996                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                               |                                                                                     | 0.857                                                                               |                                                                                     |                                                                                     | 0.851                                                                               |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1768                                                                              | 3518                                                                              | 0                                                                                 | 1701                                                                              | 3537                                                                              | 1582                                                                                | 1406                                                                                | 1565                                                                                | 0                                                                                   | 3431                                                                                | 1553                                                                                |
| Flt Permitted              |                                                                                   | 0.074                                                                             |                                                                                   |                                                                                   | 0.137                                                                             |                                                                                   |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 138                                                                               | 3518                                                                              | 0                                                                                 | 245                                                                               | 3537                                                                              | 1510                                                                                | 1397                                                                                | 1565                                                                                | 0                                                                                   | 3389                                                                                | 1553                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   | 182                                                                                 |                                                                                     | 43                                                                                  |                                                                                     |                                                                                     | 143                                                                                 |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   | 60                                                                                |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |
| Link Distance (m)          |                                                                                   |                                                                                   | 287.2                                                                             |                                                                                   |                                                                                   | 150.7                                                                             |                                                                                     |                                                                                     | 289.2                                                                               |                                                                                     |                                                                                     | 233.8                                                                               |
| Travel Time (s)            |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                   | 9.0                                                                               |                                                                                     |                                                                                     | 20.8                                                                                |                                                                                     |                                                                                     | 16.8                                                                                |
| Confl. Peds. (#/hr)        |                                                                                   | 10                                                                                |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 10                                                                                  | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 5%                                                                                | 1%                                                                                | 1%                                                                                  | 27%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 1                                                                                 | 82                                                                                | 1215                                                                              | 33                                                                                | 89                                                                                | 1532                                                                              | 212                                                                                 | 26                                                                                  | 2                                                                                   | 43                                                                                  | 177                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 83                                                                                | 1248                                                                              | 0                                                                                 | 89                                                                                | 1532                                                                              | 212                                                                                 | 26                                                                                  | 45                                                                                  | 0                                                                                   | 177                                                                                 | 144                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | R NA                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     | 10.0                                                                                |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                               | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | pm+pt                                                                             | pm+pt                                                                             | NA                                                                                |                                                                                   | pm+pt                                                                             | NA                                                                                | Perm                                                                                | Prot                                                                                | NA                                                                                  |                                                                                     | Prot                                                                                | NA                                                                                  |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |
| Permitted Phases           | 2                                                                                 | 2                                                                                 |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   | 6                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 6                                                                                 | 6                                                                                   | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   | 4                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |      |
|----------------------------|------|
| Lane Group                 | SBR  |
| Lane Configurations        |      |
| Traffic Volume (vph)       | 143  |
| Future Volume (vph)        | 143  |
| Ideal Flow (vphpl)         | 1800 |
| Storage Length (m)         | 0.0  |
| Storage Lanes              | 0    |
| Taper Length (m)           |      |
| Lane Util. Factor          | 1.00 |
| Ped Bike Factor            |      |
| Frt                        |      |
| Flt Protected              |      |
| Satd. Flow (prot)          | 0    |
| Flt Permitted              |      |
| Satd. Flow (perm)          | 0    |
| Right Turn on Red          | Yes  |
| Satd. Flow (RTOR)          |      |
| Link Speed (k/h)           |      |
| Link Distance (m)          |      |
| Travel Time (s)            |      |
| Confl. Peds. (#/hr)        | 5    |
| Peak Hour Factor           | 1.00 |
| Heavy Vehicles (%)         | 1%   |
| Adj. Flow (vph)            | 143  |
| Shared Lane Traffic (%)    |      |
| Lane Group Flow (vph)      | 0    |
| Enter Blocked Intersection | No   |
| Lane Alignment             | R NA |
| Median Width(m)            |      |
| Link Offset(m)             |      |
| Crosswalk Width(m)         |      |
| Two way Left Turn Lane     |      |
| Headway Factor             | 1.01 |
| Turning Speed (k/h)        | 14   |
| Number of Detectors        |      |
| Detector Template          |      |
| Leading Detector (m)       |      |
| Trailing Detector (m)      |      |
| Detector 1 Position(m)     |      |
| Detector 1 Size(m)         |      |
| Detector 1 Type            |      |
| Detector 1 Channel         |      |
| Detector 1 Extend (s)      |      |
| Detector 1 Queue (s)       |      |
| Detector 1 Delay (s)       |      |
| Detector 2 Position(m)     |      |
| Detector 2 Size(m)         |      |
| Detector 2 Type            |      |
| Detector 2 Channel         |      |
| Detector 2 Extend (s)      |      |
| Turn Type                  |      |
| Protected Phases           |      |
| Permitted Phases           |      |
| Detector Phase             |      |
| Switch Phase               |      |

3: Mantra/Tillage & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2036 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 10.0                                                                              | 10.0                                                                               | 5.0                                                                                 | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 10.0                                                                                |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 31.3                                                                              |                                                                                   | 11.1                                                                              | 31.3                                                                              | 31.3                                                                               | 11.5                                                                                | 31.5                                                                                |                                                                                     | 11.5                                                                                | 31.5                                                                                |
| Total Split (s)         | 17.0                                                                              | 17.0                                                                              | 53.0                                                                              |                                                                                   | 17.0                                                                              | 53.0                                                                              | 53.0                                                                               | 28.0                                                                                | 32.0                                                                                |                                                                                     | 28.0                                                                                | 32.0                                                                                |
| Total Split (%)         | 13.1%                                                                             | 13.1%                                                                             | 40.8%                                                                             |                                                                                   | 13.1%                                                                             | 40.8%                                                                             | 40.8%                                                                              | 21.5%                                                                               | 24.6%                                                                               |                                                                                     | 21.5%                                                                               | 24.6%                                                                               |
| Maximum Green (s)       | 10.9                                                                              | 10.9                                                                              | 46.7                                                                              |                                                                                   | 10.9                                                                              | 46.7                                                                              | 46.7                                                                               | 21.5                                                                                | 25.5                                                                                |                                                                                     | 21.5                                                                                | 25.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.3                                                                                 | 3.3                                                                                 |                                                                                     | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.6                                                                               |                                                                                   | 2.4                                                                               | 2.6                                                                               | 2.6                                                                                | 3.2                                                                                 | 3.2                                                                                 |                                                                                     | 3.2                                                                                 | 3.2                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.3                                                                               |                                                                                   | 6.1                                                                               | 6.3                                                                               | 6.3                                                                                | 6.5                                                                                 | 6.5                                                                                 |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lag                                                                               | Lag                                                                                | Lag                                                                                 | Lead                                                                                |                                                                                     | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | C-Max                                                                             | C-Max                                                                              | None                                                                                | None                                                                                |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                                |                                                                                     | 7.0                                                                                 |                                                                                     |                                                                                     | 7.0                                                                                 |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 18.0                                                                              |                                                                                   |                                                                                   | 18.0                                                                              | 18.0                                                                               |                                                                                     | 18.0                                                                                |                                                                                     |                                                                                     | 18.0                                                                                |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 10                                                                                |                                                                                   |                                                                                   | 10                                                                                | 10                                                                                 |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     | 5                                                                                   |
| Act Effct Green (s)     |                                                                                   | 82.0                                                                              | 74.0                                                                              |                                                                                   | 83.6                                                                              | 74.7                                                                              | 74.7                                                                               | 10.6                                                                                | 13.0                                                                                |                                                                                     | 12.3                                                                                | 16.4                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.63                                                                              | 0.57                                                                              |                                                                                   | 0.64                                                                              | 0.57                                                                              | 0.57                                                                               | 0.08                                                                                | 0.10                                                                                |                                                                                     | 0.09                                                                                | 0.13                                                                                |
| v/c Ratio               |                                                                                   | 0.45                                                                              | 0.62                                                                              |                                                                                   | 0.35                                                                              | 0.75                                                                              | 0.22                                                                               | 0.23                                                                                | 0.23                                                                                |                                                                                     | 0.55                                                                                | 0.45                                                                                |
| Control Delay           |                                                                                   | 24.0                                                                              | 20.2                                                                              |                                                                                   | 13.4                                                                              | 26.3                                                                              | 4.8                                                                                | 58.6                                                                                | 17.6                                                                                |                                                                                     | 62.4                                                                                | 12.4                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 24.0                                                                              | 20.2                                                                              |                                                                                   | 13.4                                                                              | 26.3                                                                              | 4.8                                                                                | 58.6                                                                                | 17.6                                                                                |                                                                                     | 62.4                                                                                | 12.4                                                                                |
| LOS                     |                                                                                   | C                                                                                 | C                                                                                 |                                                                                   | B                                                                                 | C                                                                                 | A                                                                                  | E                                                                                   | B                                                                                   |                                                                                     | E                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 20.5                                                                              |                                                                                   |                                                                                   | 23.1                                                                              |                                                                                    |                                                                                     | 32.6                                                                                |                                                                                     |                                                                                     | 39.9                                                                                |
| Approach LOS            |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                    |                                                                                     | C                                                                                   |                                                                                     |                                                                                     | D                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 4.1                                                                               | 78.4                                                                              |                                                                                   | 6.4                                                                               | 135.3                                                                             | 2.9                                                                                | 5.8                                                                                 | 0.5                                                                                 |                                                                                     | 20.9                                                                                | 0.2                                                                                 |
| Queue Length 95th (m)   |                                                                                   | 23.4                                                                              | 154.2                                                                             |                                                                                   | 17.6                                                                              | #248.1                                                                            | 18.4                                                                               | 13.9                                                                                | 9.9                                                                                 |                                                                                     | 31.0                                                                                | 16.3                                                                                |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 263.2                                                                             |                                                                                   |                                                                                   | 126.7                                                                             |                                                                                    |                                                                                     | 265.2                                                                               |                                                                                     |                                                                                     | 209.8                                                                               |
| Turn Bay Length (m)     |                                                                                   | 80.0                                                                              |                                                                                   |                                                                                   | 70.0                                                                              |                                                                                   | 105.0                                                                              | 55.0                                                                                |                                                                                     |                                                                                     | 35.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 227                                                                               | 2002                                                                              |                                                                                   | 288                                                                               | 2033                                                                              | 945                                                                                | 232                                                                                 | 341                                                                                 |                                                                                     | 567                                                                                 | 423                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.37                                                                              | 0.62                                                                              |                                                                                   | 0.31                                                                              | 0.75                                                                              | 0.22                                                                               | 0.11                                                                                | 0.13                                                                                |                                                                                     | 0.31                                                                                | 0.34                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 106 (82%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 23.8

Intersection LOS: C

Intersection Capacity Utilization 86.5%

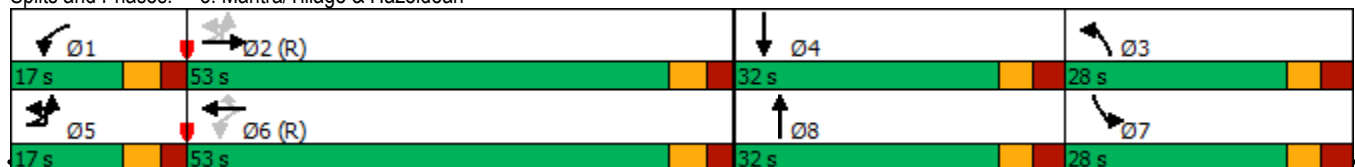
ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 3: Mantra/Tillage & Hazeldean





| Lane Group              | SBR |
|-------------------------|-----|
| Minimum Initial (s)     |     |
| Minimum Split (s)       |     |
| Total Split (s)         |     |
| Total Split (%)         |     |
| Maximum Green (s)       |     |
| Yellow Time (s)         |     |
| All-Red Time (s)        |     |
| Lost Time Adjust (s)    |     |
| Total Lost Time (s)     |     |
| Lead/Lag                |     |
| Lead-Lag Optimize?      |     |
| Vehicle Extension (s)   |     |
| Recall Mode             |     |
| Walk Time (s)           |     |
| Flash Dont Walk (s)     |     |
| Pedestrian Calls (#/hr) |     |
| Act Effct Green (s)     |     |
| Actuated g/C Ratio      |     |
| v/c Ratio               |     |
| Control Delay           |     |
| Queue Delay             |     |
| Total Delay             |     |
| LOS                     |     |
| Approach Delay          |     |
| Approach LOS            |     |
| Queue Length 50th (m)   |     |
| Queue Length 95th (m)   |     |
| Internal Link Dist (m)  |     |
| Turn Bay Length (m)     |     |
| Base Capacity (vph)     |     |
| Starvation Cap Reductn  |     |
| Spillback Cap Reductn   |     |
| Storage Cap Reductn     |     |
| Reduced v/c Ratio       |     |
| Intersection Summary    |     |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2036 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 491                                                                               | 866                                                                               | 298                                                                               | 14                                                                                | 340                                                                               | 1083                                                                               | 348                                                                                 | 339                                                                                 | 894                                                                                 | 234                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 2                                                                                 | 491                                                                               | 866                                                                               | 298                                                                               | 14                                                                                | 340                                                                               | 1083                                                                               | 348                                                                                 | 339                                                                                 | 894                                                                                 | 234                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.95                                                                              |                                                                                   | 0.99                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 3364                                                                              | 3537                                                                              | 1551                                                                              | 0                                                                                 | 3398                                                                              | 3537                                                                               | 1551                                                                                | 3397                                                                                | 3468                                                                                | 1567                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 3359                                                                              | 3537                                                                              | 1481                                                                              | 0                                                                                 | 3368                                                                              | 3537                                                                               | 1521                                                                                | 3388                                                                                | 3468                                                                                | 1527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 227                                                                               |                                                                                   |                                                                                   |                                                                                    | 169                                                                                 |                                                                                     |                                                                                     | 150                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 644.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 38.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 24                                                                                |                                                                                   | 24                                                                                |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 3%                                                                                  | 2%                                                                                  | 3%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 491                                                                               | 866                                                                               | 298                                                                               | 14                                                                                | 340                                                                               | 1083                                                                               | 348                                                                                 | 339                                                                                 | 894                                                                                 | 234                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 493                                                                               | 866                                                                               | 298                                                                               | 0                                                                                 | 354                                                                               | 1083                                                                               | 348                                                                                 | 339                                                                                 | 894                                                                                 | 234                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2036 Total Traffic

|                            |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                 | SBL                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations        |  |  |  |
| Traffic Volume (vph)       | 356                                                                               | 1029                                                                              | 485                                                                               |
| Future Volume (vph)        | 356                                                                               | 1029                                                                              | 485                                                                               |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)         | 155.0                                                                             |                                                                                   | 200.0                                                                             |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              |
| Ped Bike Factor            | 0.99                                                                              |                                                                                   | 0.98                                                                              |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)          | 3431                                                                              | 3502                                                                              | 1567                                                                              |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)          | 3410                                                                              | 3502                                                                              | 1537                                                                              |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 259                                                                               |
| Link Speed (k/h)           |                                                                                   | 70                                                                                |                                                                                   |
| Link Distance (m)          |                                                                                   | 316.2                                                                             |                                                                                   |
| Travel Time (s)            |                                                                                   | 16.3                                                                              |                                                                                   |
| Confl. Peds. (#/hr)        | 10                                                                                |                                                                                   | 5                                                                                 |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 2%                                                                                |
| Adj. Flow (vph)            | 356                                                                               | 1029                                                                              | 485                                                                               |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)      | 357                                                                               | 1029                                                                              | 485                                                                               |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)            |                                                                                   | 10.0                                                                              |                                                                                   |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 | 1                                                                                 |
| Detector Template          | Left                                                                              | Thru                                                                              | Right                                                                             |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              |
| Protected Phases           | 1                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   | 6                                                                                 |
| Detector Phase             | 1                                                                                 | 6                                                                                 | 6                                                                                 |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2036 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                                | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 23.0                                                                              | 23.0                                                                              | 42.0                                                                              | 42.0                                                                              | 23.0                                                                              | 23.0                                                                              | 42.0                                                                                | 42.0                                                                                | 18.0                                                                                | 37.0                                                                                | 37.0                                                                                | 18.0                                                                                |
| Total Split (%)         | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                             | 35.0%                                                                             | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                               | 35.0%                                                                               | 15.0%                                                                               | 30.8%                                                                               | 30.8%                                                                               | 15.0%                                                                               |
| Maximum Green (s)       | 16.5                                                                              | 16.5                                                                              | 35.5                                                                              | 35.5                                                                              | 16.5                                                                              | 16.5                                                                              | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                | 11.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                 | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                                | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                                | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 24                                                                                | 24                                                                                |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 16.5                                                                              | 36.2                                                                              | 36.2                                                                              |                                                                                   | 15.8                                                                              | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.30                                                                              | 0.30                                                                              |                                                                                   | 0.13                                                                              | 0.30                                                                                | 0.30                                                                                | 0.10                                                                                | 0.25                                                                                | 0.25                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 1.07                                                                              | 0.81                                                                              | 0.49                                                                              |                                                                                   | 0.79                                                                              | 1.04                                                                                | 0.61                                                                                | 1.04                                                                                | 1.01                                                                                | 0.47                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 110.0                                                                             | 46.0                                                                              | 12.0                                                                              |                                                                                   | 52.1                                                                              | 83.6                                                                                | 33.1                                                                                | 119.8                                                                               | 71.4                                                                                | 10.7                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 110.0                                                                             | 46.0                                                                              | 12.0                                                                              |                                                                                   | 52.1                                                                              | 83.6                                                                                | 33.1                                                                                | 119.8                                                                               | 71.4                                                                                | 10.9                                                                                |                                                                                     |
| LOS                     |                                                                                   | F                                                                                 | D                                                                                 | B                                                                                 |                                                                                   | D                                                                                 | F                                                                                   | C                                                                                   | F                                                                                   | E                                                                                   | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 58.9                                                                              |                                                                                   |                                                                                   |                                                                                   | 67.5                                                                                |                                                                                     |                                                                                     | 72.9                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | E                                                                                 |                                                                                   |                                                                                   |                                                                                   | E                                                                                   |                                                                                     |                                                                                     | E                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | ~60.8                                                                             | 92.1                                                                              | 11.4                                                                              |                                                                                   | 38.8                                                                              | ~130.3                                                                              | 45.8                                                                                | ~34.4                                                                               | ~105.8                                                                              | 15.9                                                                                |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | #91.3                                                                             | 114.8                                                                             | 34.7                                                                              |                                                                                   | #52.4                                                                             | #176.2                                                                              | 83.1                                                                                | #69.7                                                                               | #145.0                                                                              | 9.1                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 620.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                               |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                     | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 462                                                                               | 1068                                                                              | 605                                                                               |                                                                                   | 467                                                                               | 1046                                                                                | 568                                                                                 | 325                                                                                 | 881                                                                                 | 499                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 37                                                                                  |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 1.07                                                                              | 0.81                                                                              | 0.49                                                                              |                                                                                   | 0.76                                                                              | 1.04                                                                                | 0.61                                                                                | 1.04                                                                                | 1.01                                                                                | 0.51                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 135

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.16

Intersection Signal Delay: 76.3

Intersection LOS: E

Intersection Capacity Utilization 110.6%

ICU Level of Service H

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

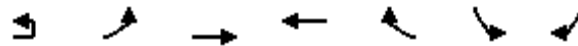
Splits and Phases: 4: Terry Fox & Hazeldean

|                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
|  |  |  |  |
| Ø1                                                                                  | Ø2 (R)                                                                              | Ø3                                                                                  | Ø4                                                                                    |
| 18 s                                                                                | 37 s                                                                                | 23 s                                                                                | 42 s                                                                                  |
|  |  |  |  |
| Ø5                                                                                  | Ø6 (R)                                                                              | Ø7                                                                                  | Ø8                                                                                    |
| 18 s                                                                                | 37 s                                                                                | 23 s                                                                                | 42 s                                                                                  |





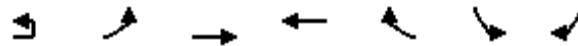
| Lane Group              | SBL   | SBT    | SBR    |
|-------------------------|-------|--------|--------|
| Switch Phase            |       |        |        |
| Minimum Initial (s)     | 5.0   | 10.0   | 10.0   |
| Minimum Split (s)       | 11.5  | 35.5   | 35.5   |
| Total Split (s)         | 18.0  | 37.0   | 37.0   |
| Total Split (%)         | 15.0% | 30.8%  | 30.8%  |
| Maximum Green (s)       | 11.5  | 30.5   | 30.5   |
| Yellow Time (s)         | 4.2   | 4.2    | 4.2    |
| All-Red Time (s)        | 2.3   | 2.3    | 2.3    |
| Lost Time Adjust (s)    | 0.0   | 0.0    | 0.0    |
| Total Lost Time (s)     | 6.5   | 6.5    | 6.5    |
| Lead/Lag                | Lead  | Lag    | Lag    |
| Lead-Lag Optimize?      |       |        |        |
| Vehicle Extension (s)   | 3.0   | 3.0    | 3.0    |
| Recall Mode             | None  | C-Max  | C-Max  |
| Walk Time (s)           |       | 7.0    | 7.0    |
| Flash Dont Walk (s)     |       | 22.0   | 22.0   |
| Pedestrian Calls (#/hr) |       | 10     | 10     |
| Act Effct Green (s)     | 11.5  | 30.5   | 30.5   |
| Actuated g/C Ratio      | 0.10  | 0.25   | 0.25   |
| v/c Ratio               | 1.09  | 1.16   | 0.83   |
| Control Delay           | 126.6 | 123.4  | 35.1   |
| Queue Delay             | 9.2   | 0.0    | 0.0    |
| Total Delay             | 135.9 | 123.4  | 35.1   |
| LOS                     | F     | F      | D      |
| Approach Delay          |       | 102.9  |        |
| Approach LOS            |       | F      |        |
| Queue Length 50th (m)   | ~46.1 | ~135.1 | 32.5   |
| Queue Length 95th (m)   | #74.3 | #173.7 | #101.9 |
| Internal Link Dist (m)  |       | 292.2  |        |
| Turn Bay Length (m)     | 155.0 |        | 200.0  |
| Base Capacity (vph)     | 328   | 890    | 583    |
| Starvation Cap Reductn  | 0     | 0      | 0      |
| Spillback Cap Reductn   | 105   | 0      | 0      |
| Storage Cap Reductn     | 0     | 0      | 0      |
| Reduced v/c Ratio       | 1.60  | 1.16   | 0.83   |
| Intersection Summary    |       |        |        |



| Lane Group                 | EBU   | EBL   | EBT   | WBT   | WBR   | SBL   | SBR   |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|
| Lane Configurations        |       |       |       |       |       |       |       |
| Traffic Volume (vph)       | 4     | 78    | 1400  | 1879  | 54    | 99    | 97    |
| Future Volume (vph)        | 4     | 78    | 1400  | 1879  | 54    | 99    | 97    |
| Ideal Flow (vphpl)         | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  | 1800  |
| Storage Length (m)         |       | 35.0  |       |       | 0.0   | 30.0  | 0.0   |
| Storage Lanes              |       | 1     |       |       | 0     | 1     | 1     |
| Taper Length (m)           |       | 40.0  |       |       |       | 40.0  |       |
| Lane Util. Factor          | 0.95  | 1.00  | 0.95  | 0.95  | 0.95  | 1.00  | 1.00  |
| Ped Bike Factor            |       |       |       | 1.00  |       | 0.99  | 0.97  |
| Frt                        |       |       |       | 0.996 |       |       | 0.850 |
| Flt Protected              |       | 0.950 |       |       |       | 0.950 |       |
| Satd. Flow (prot)          | 0     | 1752  | 3537  | 3517  | 0     | 1768  | 1582  |
| Flt Permitted              |       | 0.071 |       |       |       | 0.950 |       |
| Satd. Flow (perm)          | 0     | 131   | 3537  | 3517  | 0     | 1746  | 1533  |
| Right Turn on Red          |       |       |       |       | Yes   |       | Yes   |
| Satd. Flow (RTOR)          |       |       |       | 5     |       |       | 20    |
| Link Speed (k/h)           |       |       | 60    | 60    |       | 50    |       |
| Link Distance (m)          |       |       | 157.6 | 314.8 |       | 401.6 |       |
| Travel Time (s)            |       |       | 9.5   | 18.9  |       | 28.9  |       |
| Confl. Peds. (#/hr)        |       | 17    |       |       | 17    | 10    | 15    |
| Peak Hour Factor           | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 1%    | 2%    | 1%    | 1%    | 1%    | 1%    | 1%    |
| Adj. Flow (vph)            | 4     | 78    | 1400  | 1879  | 54    | 99    | 97    |
| Shared Lane Traffic (%)    |       |       |       |       |       |       |       |
| Lane Group Flow (vph)      | 0     | 82    | 1400  | 1933  | 0     | 99    | 97    |
| Enter Blocked Intersection | No    | No    | No    | No    | No    | No    | No    |
| Lane Alignment             | R NA  | L NA  | Left  | Left  | Right | L NA  | R NA  |
| Median Width(m)            |       |       | 8.0   | 4.0   |       | 4.0   |       |
| Link Offset(m)             |       |       | 0.0   | 0.0   |       | 0.0   |       |
| Crosswalk Width(m)         |       |       | 5.0   | 5.0   |       | 5.0   |       |
| Two way Left Turn Lane     |       |       |       |       |       |       |       |
| Headway Factor             | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  | 1.01  |
| Turning Speed (k/h)        | 14    | 24    |       |       | 14    | 24    | 14    |
| Number of Detectors        | 1     | 1     | 2     | 2     |       | 1     | 1     |
| Detector Template          | Left  | Left  | Thru  | Thru  |       | Left  | Right |
| Leading Detector (m)       | 2.0   | 2.0   | 10.0  | 10.0  |       | 2.0   | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Size(m)         | 2.0   | 2.0   | 0.6   | 0.6   |       | 2.0   | 2.0   |
| Detector 1 Type            | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex |       | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |       |       |       |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   | 0.0   | 0.0   |       | 0.0   | 0.0   |
| Detector 2 Position(m)     |       |       | 9.4   | 9.4   |       |       |       |
| Detector 2 Size(m)         |       |       | 0.6   | 0.6   |       |       |       |
| Detector 2 Type            |       |       | Cl+Ex | Cl+Ex |       |       |       |
| Detector 2 Channel         |       |       |       |       |       |       |       |
| Detector 2 Extend (s)      |       |       | 0.0   | 0.0   |       |       |       |
| Turn Type                  | Perm  | Perm  | NA    | NA    |       | Perm  | Perm  |
| Protected Phases           |       |       | 2     | 6     |       |       |       |
| Permitted Phases           | 2     | 2     |       |       |       | 4     | 4     |
| Detector Phase             | 2     | 2     | 2     | 6     |       | 4     | 4     |
| Switch Phase               |       |       |       |       |       |       |       |

5: Hazeldean & Edgewater  
PM Peak Hour

560 Hazeldean Road  
2036 Total Traffic



| Lane Group              | EBU   | EBL    | EBT    | WBT   | WBR | SBL   | SBR   |
|-------------------------|-------|--------|--------|-------|-----|-------|-------|
| Minimum Initial (s)     | 10.0  | 10.0   | 10.0   | 10.0  |     | 10.0  | 10.0  |
| Minimum Split (s)       | 16.2  | 16.2   | 16.2   | 31.2  |     | 34.1  | 34.1  |
| Total Split (s)         | 86.0  | 86.0   | 86.0   | 86.0  |     | 34.0  | 34.0  |
| Total Split (%)         | 71.7% | 71.7%  | 71.7%  | 71.7% |     | 28.3% | 28.3% |
| Maximum Green (s)       | 79.8  | 79.8   | 79.8   | 79.8  |     | 27.9  | 27.9  |
| Yellow Time (s)         | 3.7   | 3.7    | 3.7    | 3.7   |     | 3.3   | 3.3   |
| All-Red Time (s)        | 2.5   | 2.5    | 2.5    | 2.5   |     | 2.8   | 2.8   |
| Lost Time Adjust (s)    |       | 0.0    | 0.0    | 0.0   |     | 0.0   | 0.0   |
| Total Lost Time (s)     |       | 6.2    | 6.2    | 6.2   |     | 6.1   | 6.1   |
| Lead/Lag                |       |        |        |       |     |       |       |
| Lead-Lag Optimize?      |       |        |        |       |     |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0    | 3.0    | 3.0   |     | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max  | C-Max  | C-Max |     | None  | None  |
| Walk Time (s)           |       |        |        | 7.0   |     | 7.0   | 7.0   |
| Flash Dont Walk (s)     |       |        |        | 18.0  |     | 21.0  | 21.0  |
| Pedestrian Calls (#/hr) |       |        |        | 17    |     | 15    | 15    |
| Act Effct Green (s)     |       | 90.1   | 90.1   | 90.1  |     | 17.6  | 17.6  |
| Actuated g/C Ratio      |       | 0.75   | 0.75   | 0.75  |     | 0.15  | 0.15  |
| v/c Ratio               |       | 0.84   | 0.53   | 0.73  |     | 0.39  | 0.40  |
| Control Delay           |       | 68.8   | 15.9   | 12.1  |     | 44.3  | 34.9  |
| Queue Delay             |       | 0.0    | 3.9    | 0.0   |     | 0.0   | 0.0   |
| Total Delay             |       | 68.8   | 19.8   | 12.1  |     | 44.3  | 34.9  |
| LOS                     |       | E      | B      | B     |     | D     | C     |
| Approach Delay          |       |        | 22.5   | 12.1  |     | 39.7  |       |
| Approach LOS            |       |        | C      | B     |     | D     |       |
| Queue Length 50th (m)   |       | 14.7   | 108.8  | 80.4  |     | 21.2  | 16.5  |
| Queue Length 95th (m)   |       | m#26.0 | m172.6 | 181.1 |     | m28.9 | m23.6 |
| Internal Link Dist (m)  |       |        | 133.6  | 290.8 |     | 377.6 |       |
| Turn Bay Length (m)     |       | 35.0   |        |       |     | 30.0  |       |
| Base Capacity (vph)     |       | 98     | 2655   | 2641  |     | 405   | 371   |
| Starvation Cap Reductn  |       | 0      | 1147   | 0     |     | 0     | 0     |
| Spillback Cap Reductn   |       | 0      | 0      | 0     |     | 0     | 0     |
| Storage Cap Reductn     |       | 0      | 0      | 0     |     | 0     | 0     |
| Reduced v/c Ratio       |       | 0.84   | 0.93   | 0.73  |     | 0.24  | 0.26  |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 10 (8%), Referenced to phase 2:EBTL and 6:WBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 17.9

Intersection LOS: B

Intersection Capacity Utilization 94.7%

ICU Level of Service F

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 5: Hazeldean & Edgewater



Signal Timing Diagram

Signal Timing Diagram

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                  | 1494                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1853                                                                                |
| Future Volume (vph)        | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                  | 1494                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1853                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.98                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                    | 0.994                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1669                                                                              | 1554                                                                              | 0                                                                                 | 1768                                                                              | 1560                                                                              | 0                                                                                 | 1768                                                                               | 3478                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3537                                                                                |
| Flt Permitted              | 0.397                                                                             |                                                                                   |                                                                                   | 0.752                                                                             |                                                                                   |                                                                                   | 0.080                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.080                                                                               |                                                                                     |
| Satd. Flow (perm)          | 695                                                                               | 1554                                                                              | 0                                                                                 | 1391                                                                              | 1560                                                                              | 0                                                                                 | 149                                                                                | 3478                                                                                | 0                                                                                   | 0                                                                                   | 146                                                                                 | 3537                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 122                                                                               |                                                                                   |                                                                                   | 112                                                                               |                                                                                   |                                                                                    | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                    | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                    | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                  |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 7%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 2%                                                                                  | 1%                                                                                  | 1%                                                                                  | 3%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 15                                                                                | 0                                                                                 | 8                                                                                 | 41                                                                                | 4                                                                                 | 185                                                                               | 2                                                                                  | 1494                                                                                | 63                                                                                  | 1                                                                                   | 164                                                                                 | 1853                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 15                                                                                | 8                                                                                 | 0                                                                                 | 41                                                                                | 189                                                                               | 0                                                                                 | 2                                                                                  | 1557                                                                                | 0                                                                                   | 0                                                                                   | 165                                                                                 | 1853                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                    | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 29    |
| Future Volume (vph)        | 29    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1551  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1504  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 92    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 3%    |
| Adj. Flow (vph)            | 29    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 29    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 5.0                                                                                | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 5.0                                                                                 | 10.0                                                                                |
| Minimum Split (s)       | 36.5                                                                              | 36.5                                                                              |                                                                                   | 36.5                                                                              | 36.5                                                                              |                                                                                   | 11.6                                                                               | 34.5                                                                                |                                                                                     | 11.6                                                                                | 11.6                                                                                | 34.5                                                                                |
| Total Split (s)         | 37.0                                                                              | 37.0                                                                              |                                                                                   | 37.0                                                                              | 37.0                                                                              |                                                                                   | 14.0                                                                               | 69.0                                                                                |                                                                                     | 14.0                                                                                | 14.0                                                                                | 69.0                                                                                |
| Total Split (%)         | 30.8%                                                                             | 30.8%                                                                             |                                                                                   | 30.8%                                                                             | 30.8%                                                                             |                                                                                   | 11.7%                                                                              | 57.5%                                                                               |                                                                                     | 11.7%                                                                               | 11.7%                                                                               | 57.5%                                                                               |
| Maximum Green (s)       | 30.5                                                                              | 30.5                                                                              |                                                                                   | 30.5                                                                              | 30.5                                                                              |                                                                                   | 7.4                                                                                | 62.5                                                                                |                                                                                     | 7.4                                                                                 | 7.4                                                                                 | 62.5                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 3.2                                                                               | 3.2                                                                               |                                                                                   | 3.2                                                                               | 3.2                                                                               |                                                                                   | 2.4                                                                                | 2.3                                                                                 |                                                                                     | 2.4                                                                                 | 2.4                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.6                                                                                | 6.5                                                                                 |                                                                                     |                                                                                     | 6.6                                                                                 | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lag                                                                                 |                                                                                     | Lead                                                                                | Lead                                                                                | Lag                                                                                 |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | C-Max                                                                               |                                                                                     | None                                                                                | None                                                                                | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                    | 7.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   |                                                                                    | 21.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 21.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                    | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     | 5                                                                                   |
| Act Effct Green (s)     | 15.3                                                                              | 15.3                                                                              |                                                                                   | 15.3                                                                              | 15.3                                                                              |                                                                                   | 77.4                                                                               | 71.9                                                                                |                                                                                     |                                                                                     | 90.7                                                                                | 89.2                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.64                                                                               | 0.60                                                                                |                                                                                     |                                                                                     | 0.76                                                                                | 0.74                                                                                |
| v/c Ratio               | 0.17                                                                              | 0.03                                                                              |                                                                                   | 0.23                                                                              | 0.64                                                                              |                                                                                   | 0.01                                                                               | 0.75                                                                                |                                                                                     |                                                                                     | 0.58                                                                                | 0.70                                                                                |
| Control Delay           | 46.7                                                                              | 0.1                                                                               |                                                                                   | 40.0                                                                              | 24.9                                                                              |                                                                                   | 5.5                                                                                | 11.7                                                                                |                                                                                     |                                                                                     | 24.7                                                                                | 13.0                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 46.7                                                                              | 0.1                                                                               |                                                                                   | 40.0                                                                              | 24.9                                                                              |                                                                                   | 5.5                                                                                | 11.7                                                                                |                                                                                     |                                                                                     | 24.7                                                                                | 13.0                                                                                |
| LOS                     | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | B                                                                                   |                                                                                     |                                                                                     | C                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 30.5                                                                              |                                                                                   |                                                                                   | 27.6                                                                              |                                                                                   |                                                                                    | 11.7                                                                                |                                                                                     |                                                                                     |                                                                                     | 13.8                                                                                |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 3.0                                                                               | 0.0                                                                               |                                                                                   | 8.5                                                                               | 18.5                                                                              |                                                                                   | 0.0                                                                                | 53.7                                                                                |                                                                                     |                                                                                     | 9.9                                                                                 | 74.4                                                                                |
| Queue Length 95th (m)   | 7.9                                                                               | 0.0                                                                               |                                                                                   | m11.3                                                                             | m26.2                                                                             |                                                                                   | m0.2                                                                               | 67.3                                                                                |                                                                                     |                                                                                     | #52.8                                                                               | #252.6                                                                              |
| Internal Link Dist (m)  |                                                                                   | 193.1                                                                             |                                                                                   |                                                                                   | 258.1                                                                             |                                                                                   |                                                                                    | 229.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 336.0                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 65.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |                                                                                     |
| Base Capacity (vph)     | 176                                                                               | 485                                                                               |                                                                                   | 353                                                                               | 480                                                                               |                                                                                   | 198                                                                                | 2087                                                                                |                                                                                     |                                                                                     | 283                                                                                 | 2629                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.09                                                                              | 0.02                                                                              |                                                                                   | 0.12                                                                              | 0.39                                                                              |                                                                                   | 0.01                                                                               | 0.75                                                                                |                                                                                     |                                                                                     | 0.58                                                                                | 0.70                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 46 (38%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 13.9

Intersection LOS: B

Intersection Capacity Utilization 89.5%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 69.0  |
| Total Split (%)         | 57.5% |
| Maximum Green (s)       | 62.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                | Lag   |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 89.2  |
| Actuated g/C Ratio      | 0.74  |
| v/c Ratio               | 0.03  |
| Control Delay           | 0.0   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.0   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.0   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1141  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.03  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBU                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |                                                                                    |  |  |                                                                                     |                                                                                     |  |
| Traffic Volume (vph)       | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1365                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Future Volume (vph)        | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1365                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 35.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               |                                                                                    | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 |                                                                                    | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |
| Taper Length (m)           | 25.0                                                                              |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                    | 10.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.95                                                                               | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                |
| Ped Bike Factor            | 0.99                                                                              | 0.98                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                    |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                    |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 1768                                                                              | 1552                                                                              | 0                                                                                 | 1488                                                                              | 1552                                                                              | 0                                                                                 | 0                                                                                  | 1768                                                                                | 3457                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                |
| Flt Permitted              | 0.756                                                                             |                                                                                   |                                                                                   | 0.740                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.101                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.170                                                                               |
| Satd. Flow (perm)          | 1398                                                                              | 1552                                                                              | 0                                                                                 | 1152                                                                              | 1552                                                                              | 0                                                                                 | 0                                                                                  | 188                                                                                 | 3457                                                                                | 0                                                                                   | 0                                                                                   | 316                                                                                 |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 116                                                                               |                                                                                   |                                                                                   | 136                                                                               |                                                                                   |                                                                                    |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   | 207.5                                                                             |                                                                                   |                                                                                   | 88.7                                                                              |                                                                                   |                                                                                    |                                                                                     | 316.2                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   | 14.9                                                                              |                                                                                   |                                                                                   | 10.6                                                                              |                                                                                   |                                                                                    |                                                                                     | 16.3                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 20%                                                                               | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 3%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 3                                                                                 | 0                                                                                 | 26                                                                                | 5                                                                                 | 0                                                                                 | 3                                                                                 | 3                                                                                  | 36                                                                                  | 1365                                                                                | 24                                                                                  | 1                                                                                   | 3                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 3                                                                                 | 26                                                                                | 0                                                                                 | 5                                                                                 | 3                                                                                 | 0                                                                                 | 0                                                                                  | 39                                                                                  | 1389                                                                                | 0                                                                                   | 0                                                                                   | 4                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                               | Left                                                                                | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 12.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                 | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                  | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                               | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | pm+pt                                                                              | pm+pt                                                                               | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                  | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



|                            | ↓     | ↙    |
|----------------------------|-------|------|
| Lane Group                 | SBT   | SBR  |
| Lane Configurations        | ↑↑    |      |
| Traffic Volume (vph)       | 1678  | 1    |
| Future Volume (vph)        | 1678  | 1    |
| Ideal Flow (vphpl)         | 1800  | 1800 |
| Storage Length (m)         |       | 0.0  |
| Storage Lanes              |       | 0    |
| Taper Length (m)           |       |      |
| Lane Util. Factor          | 0.95  | 0.95 |
| Ped Bike Factor            | 1.00  |      |
| Frt                        |       |      |
| Flt Protected              |       |      |
| Satd. Flow (prot)          | 3537  | 0    |
| Flt Permitted              |       |      |
| Satd. Flow (perm)          | 3537  | 0    |
| Right Turn on Red          |       | Yes  |
| Satd. Flow (RTOR)          |       |      |
| Link Speed (k/h)           | 70    |      |
| Link Distance (m)          | 253.3 |      |
| Travel Time (s)            | 13.0  |      |
| Confl. Peds. (#/hr)        |       | 5    |
| Peak Hour Factor           | 1.00  | 1.00 |
| Heavy Vehicles (%)         | 1%    | 1%   |
| Adj. Flow (vph)            | 1678  | 1    |
| Shared Lane Traffic (%)    |       |      |
| Lane Group Flow (vph)      | 1679  | 0    |
| Enter Blocked Intersection | No    | No   |
| Lane Alignment             | Left  | R NA |
| Median Width(m)            | 12.0  |      |
| Link Offset(m)             | 0.0   |      |
| Crosswalk Width(m)         | 5.0   |      |
| Two way Left Turn Lane     |       |      |
| Headway Factor             | 1.01  | 1.01 |
| Turning Speed (k/h)        |       | 14   |
| Number of Detectors        | 2     |      |
| Detector Template          | Thru  |      |
| Leading Detector (m)       | 10.0  |      |
| Trailing Detector (m)      | 0.0   |      |
| Detector 1 Position(m)     | 0.0   |      |
| Detector 1 Size(m)         | 0.6   |      |
| Detector 1 Type            | CI+Ex |      |
| Detector 1 Channel         |       |      |
| Detector 1 Extend (s)      | 0.0   |      |
| Detector 1 Queue (s)       | 0.0   |      |
| Detector 1 Delay (s)       | 0.0   |      |
| Detector 2 Position(m)     | 9.4   |      |
| Detector 2 Size(m)         | 0.6   |      |
| Detector 2 Type            | CI+Ex |      |
| Detector 2 Channel         |       |      |
| Detector 2 Extend (s)      | 0.0   |      |
| Turn Type                  | NA    |      |
| Protected Phases           | 6     |      |
| Permitted Phases           |       |      |
| Detector Phase             | 6     |      |
| Switch Phase               |       |      |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBU                                                                                | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 5.0                                                                                | 5.0                                                                                 | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 5.0                                                                                 |
| Minimum Split (s)       | 32.2                                                                              | 32.2                                                                              |                                                                                   | 32.2                                                                              | 32.2                                                                              |                                                                                   | 11.5                                                                               | 11.5                                                                                | 32.5                                                                                |                                                                                     | 11.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 33.0                                                                              | 33.0                                                                              |                                                                                   | 33.0                                                                              | 33.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                | 72.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                |
| Total Split (%)         | 27.5%                                                                             | 27.5%                                                                             |                                                                                   | 27.5%                                                                             | 27.5%                                                                             |                                                                                   | 12.5%                                                                              | 12.5%                                                                               | 60.0%                                                                               |                                                                                     | 12.5%                                                                               | 12.5%                                                                               |
| Maximum Green (s)       | 26.8                                                                              | 26.8                                                                              |                                                                                   | 26.8                                                                              | 26.8                                                                              |                                                                                   | 8.5                                                                                | 8.5                                                                                 | 65.5                                                                                |                                                                                     | 8.5                                                                                 | 8.5                                                                                 |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.9                                                                               | 2.9                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Total Lost Time (s)     | 6.2                                                                               | 6.2                                                                               |                                                                                   | 6.2                                                                               | 6.2                                                                               |                                                                                   |                                                                                    | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |                                                                                     | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lead                                                                               | Lead                                                                                | Lag                                                                                 |                                                                                     | Lead                                                                                | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | None                                                                               | None                                                                                | C-Max                                                                               |                                                                                     | None                                                                                | None                                                                                |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                    |                                                                                     | 7.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Flash Dont Walk (s)     | 19.0                                                                              | 19.0                                                                              |                                                                                   | 19.0                                                                              | 19.0                                                                              |                                                                                   |                                                                                    |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                    |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Act Effct Green (s)     | 13.2                                                                              | 13.2                                                                              |                                                                                   | 13.2                                                                              | 13.2                                                                              |                                                                                   |                                                                                    | 99.6                                                                                | 100.7                                                                               |                                                                                     |                                                                                     | 96.1                                                                                |
| Actuated g/C Ratio      | 0.11                                                                              | 0.11                                                                              |                                                                                   | 0.11                                                                              | 0.11                                                                              |                                                                                   |                                                                                    | 0.83                                                                                | 0.84                                                                                |                                                                                     |                                                                                     | 0.80                                                                                |
| v/c Ratio               | 0.02                                                                              | 0.10                                                                              |                                                                                   | 0.04                                                                              | 0.01                                                                              |                                                                                   |                                                                                    | 0.17                                                                                | 0.48                                                                                |                                                                                     |                                                                                     | 0.01                                                                                |
| Control Delay           | 43.0                                                                              | 0.7                                                                               |                                                                                   | 43.8                                                                              | 0.0                                                                               |                                                                                   |                                                                                    | 2.6                                                                                 | 2.4                                                                                 |                                                                                     |                                                                                     | 5.8                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |
| Total Delay             | 43.0                                                                              | 0.7                                                                               |                                                                                   | 43.8                                                                              | 0.0                                                                               |                                                                                   |                                                                                    | 2.6                                                                                 | 2.4                                                                                 |                                                                                     |                                                                                     | 5.8                                                                                 |
| LOS                     | D                                                                                 | A                                                                                 |                                                                                   | D                                                                                 | A                                                                                 |                                                                                   |                                                                                    | A                                                                                   | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   |
| Approach Delay          |                                                                                   | 5.1                                                                               |                                                                                   |                                                                                   | 27.4                                                                              |                                                                                   |                                                                                    |                                                                                     | 2.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    |                                                                                     | A                                                                                   |                                                                                     |                                                                                     |                                                                                     |
| Queue Length 50th (m)   | 0.6                                                                               | 0.0                                                                               |                                                                                   | 1.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | 1.0                                                                                 | 20.9                                                                                |                                                                                     |                                                                                     | 0.1                                                                                 |
| Queue Length 95th (m)   | 2.9                                                                               | 0.0                                                                               |                                                                                   | 4.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                    | m1.6                                                                                | m27.4                                                                               |                                                                                     |                                                                                     | m0.4                                                                                |
| Internal Link Dist (m)  |                                                                                   | 183.5                                                                             |                                                                                   |                                                                                   | 64.7                                                                              |                                                                                   |                                                                                    |                                                                                     | 292.2                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Turn Bay Length (m)     | 35.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |
| Base Capacity (vph)     | 312                                                                               | 436                                                                               |                                                                                   | 257                                                                               | 452                                                                               |                                                                                   |                                                                                    | 268                                                                                 | 2902                                                                                |                                                                                     |                                                                                     | 360                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                    | 0                                                                                   | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   |
| Reduced v/c Ratio       | 0.01                                                                              | 0.06                                                                              |                                                                                   | 0.02                                                                              | 0.01                                                                              |                                                                                   |                                                                                    | 0.15                                                                                | 0.48                                                                                |                                                                                     |                                                                                     | 0.01                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 40 (33%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 4.4

Intersection LOS: A

Intersection Capacity Utilization 70.0%

ICU Level of Service C

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 7: Terry Fox & Tony Graham Rec





| Lane Group              | SBT   | SBR |
|-------------------------|-------|-----|
| Minimum Initial (s)     | 10.0  |     |
| Minimum Split (s)       | 32.5  |     |
| Total Split (s)         | 72.0  |     |
| Total Split (%)         | 60.0% |     |
| Maximum Green (s)       | 65.5  |     |
| Yellow Time (s)         | 4.2   |     |
| All-Red Time (s)        | 2.3   |     |
| Lost Time Adjust (s)    | 0.0   |     |
| Total Lost Time (s)     | 6.5   |     |
| Lead/Lag                | Lag   |     |
| Lead-Lag Optimize?      |       |     |
| Vehicle Extension (s)   | 3.0   |     |
| Recall Mode             | C-Max |     |
| Walk Time (s)           | 7.0   |     |
| Flash Dont Walk (s)     | 19.0  |     |
| Pedestrian Calls (#/hr) | 5     |     |
| Act Effct Green (s)     | 95.4  |     |
| Actuated g/C Ratio      | 0.80  |     |
| v/c Ratio               | 0.60  |     |
| Control Delay           | 6.0   |     |
| Queue Delay             | 0.0   |     |
| Total Delay             | 6.0   |     |
| LOS                     | A     |     |
| Approach Delay          | 6.0   |     |
| Approach LOS            | A     |     |
| Queue Length 50th (m)   | 31.5  |     |
| Queue Length 95th (m)   | 59.8  |     |
| Internal Link Dist (m)  | 229.3 |     |
| Turn Bay Length (m)     |       |     |
| Base Capacity (vph)     | 2810  |     |
| Starvation Cap Reductn  | 47    |     |
| Spillback Cap Reductn   | 0     |     |
| Storage Cap Reductn     | 0     |     |
| Reduced v/c Ratio       | 0.61  |     |
| Intersection Summary    |       |     |

8: Terry Fox & Sobey's  
PM Peak Hour

560 Hazeldean Road  
2036 Total Traffic

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |                                                                                   |  |                                                                                   |                                                                                   |  |  |  |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 1116                                                                                | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1525                                                                                |
| Future Volume (vph)        | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 1116                                                                                | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1525                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 10.0                                                                              |                                                                                   | 0.0                                                                               | 70.0                                                                               |                                                                                     | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     |
| Storage Lanes              | 0                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                  |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 30.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 0.91                                                                                | 0.91                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 0.99                                                                              |                                                                                   |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                    | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   | 0.917                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                    | 0.990                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.992                                                                               |
| Flt Protected              |                                                                                   | 0.984                                                                             |                                                                                   |                                                                                   | 0.954                                                                             |                                                                                   | 0.950                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 1658                                                                              | 0                                                                                 | 0                                                                                 | 1776                                                                              | 1582                                                                              | 1768                                                                               | 5020                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3499                                                                                |
| Flt Permitted              |                                                                                   | 0.864                                                                             |                                                                                   |                                                                                   | 0.602                                                                             |                                                                                   | 0.114                                                                              |                                                                                     |                                                                                     |                                                                                     | 0.213                                                                               |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 1453                                                                              | 0                                                                                 | 0                                                                                 | 1114                                                                              | 1552                                                                              | 212                                                                                | 5020                                                                                | 0                                                                                   | 0                                                                                   | 396                                                                                 | 3499                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                    |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 103                                                                               |                                                                                    | 18                                                                                  |                                                                                     |                                                                                     |                                                                                     | 9                                                                                   |
| Link Speed (k/h)           |                                                                                   | 30                                                                                |                                                                                   |                                                                                   | 30                                                                                |                                                                                   |                                                                                    | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 132.0                                                                             |                                                                                   |                                                                                   | 152.6                                                                             |                                                                                   |                                                                                    | 140.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 142.7                                                                               |
| Travel Time (s)            |                                                                                   | 15.8                                                                              |                                                                                   |                                                                                   | 18.3                                                                              |                                                                                   |                                                                                    | 7.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.3                                                                                 |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 10                                                                                 |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                 | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 37                                                                                | 8                                                                                 | 72                                                                                | 78                                                                                | 2                                                                                 | 103                                                                               | 26                                                                                 | 1116                                                                                | 76                                                                                  | 2                                                                                   | 115                                                                                 | 1525                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 117                                                                               | 0                                                                                 | 0                                                                                 | 80                                                                                | 103                                                                               | 26                                                                                 | 1192                                                                                | 0                                                                                   | 0                                                                                   | 117                                                                                 | 1607                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                               | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                    | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                 |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                  | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                               | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                                | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                                | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                    | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                    | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                    | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                    | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                | Perm                                                                              | Perm                                                                               | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   | 8                                                                                 | 2                                                                                  |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 | 8                                                                                 | 2                                                                                  | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |

|                            |      |    |
|----------------------------|------|----|
| Lane Group                 | SBR  | Ø9 |
| Lane Configurations        |      |    |
| Traffic Volume (vph)       | 82   |    |
| Future Volume (vph)        | 82   |    |
| Ideal Flow (vphpl)         | 1800 |    |
| Storage Length (m)         | 0.0  |    |
| Storage Lanes              | 0    |    |
| Taper Length (m)           |      |    |
| Lane Util. Factor          | 0.95 |    |
| Ped Bike Factor            |      |    |
| Frt                        |      |    |
| Flt Protected              |      |    |
| Satd. Flow (prot)          | 0    |    |
| Flt Permitted              |      |    |
| Satd. Flow (perm)          | 0    |    |
| Right Turn on Red          | Yes  |    |
| Satd. Flow (RTOR)          |      |    |
| Link Speed (k/h)           |      |    |
| Link Distance (m)          |      |    |
| Travel Time (s)            |      |    |
| Confl. Peds. (#/hr)        | 10   |    |
| Confl. Bikes (#/hr)        | 1    |    |
| Peak Hour Factor           | 1.00 |    |
| Heavy Vehicles (%)         | 1%   |    |
| Adj. Flow (vph)            | 82   |    |
| Shared Lane Traffic (%)    |      |    |
| Lane Group Flow (vph)      | 0    |    |
| Enter Blocked Intersection | No   |    |
| Lane Alignment             | R NA |    |
| Median Width(m)            |      |    |
| Link Offset(m)             |      |    |
| Crosswalk Width(m)         |      |    |
| Two way Left Turn Lane     |      |    |
| Headway Factor             | 1.01 |    |
| Turning Speed (k/h)        | 14   |    |
| Number of Detectors        |      |    |
| Detector Template          |      |    |
| Leading Detector (m)       |      |    |
| Trailing Detector (m)      |      |    |
| Detector 1 Position(m)     |      |    |
| Detector 1 Size(m)         |      |    |
| Detector 1 Type            |      |    |
| Detector 1 Channel         |      |    |
| Detector 1 Extend (s)      |      |    |
| Detector 1 Queue (s)       |      |    |
| Detector 1 Delay (s)       |      |    |
| Detector 2 Position(m)     |      |    |
| Detector 2 Size(m)         |      |    |
| Detector 2 Type            |      |    |
| Detector 2 Channel         |      |    |
| Detector 2 Extend (s)      |      |    |
| Turn Type                  |      |    |
| Protected Phases           | 9    |    |
| Permitted Phases           |      |    |
| Detector Phase             |      |    |

8: Terry Fox & Sobey's  
PM Peak Hour

560 Hazeldean Road  
2036 Total Traffic

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              | 10.0                                                                              | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 26.0                                                                               | 26.0                                                                                |                                                                                     | 26.0                                                                                | 26.0                                                                                | 26.0                                                                                |
| Total Split (s)         | 31.0                                                                              | 31.0                                                                              |                                                                                   | 31.0                                                                              | 31.0                                                                              | 31.0                                                                              | 84.0                                                                               | 84.0                                                                                |                                                                                     | 84.0                                                                                | 84.0                                                                                | 84.0                                                                                |
| Total Split (%)         | 25.8%                                                                             | 25.8%                                                                             |                                                                                   | 25.8%                                                                             | 25.8%                                                                             | 25.8%                                                                             | 70.0%                                                                              | 70.0%                                                                               |                                                                                     | 70.0%                                                                               | 70.0%                                                                               | 70.0%                                                                               |
| Maximum Green (s)       | 24.0                                                                              | 24.0                                                                              |                                                                                   | 24.0                                                                              | 24.0                                                                              | 24.0                                                                              | 78.0                                                                               | 78.0                                                                                |                                                                                     | 78.0                                                                                | 78.0                                                                                | 78.0                                                                                |
| Yellow Time (s)         | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 4.0                                                                               | 4.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 1.8                                                                                | 1.8                                                                                 |                                                                                     | 1.8                                                                                 | 1.8                                                                                 | 1.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               | 6.0                                                                                | 6.0                                                                                 |                                                                                     |                                                                                     | 6.0                                                                                 | 6.0                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              | None                                                                              | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               | 7.0                                                                               | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 17.0                                                                              | 17.0                                                                              |                                                                                   | 17.0                                                                              | 17.0                                                                              | 17.0                                                                              | 13.0                                                                               | 13.0                                                                                |                                                                                     | 13.0                                                                                | 13.0                                                                                | 13.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 | 5                                                                                 | 5                                                                                  | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  | 10                                                                                  |
| Act Effct Green (s)     |                                                                                   | 14.8                                                                              |                                                                                   |                                                                                   | 14.8                                                                              | 14.8                                                                              | 87.2                                                                               | 87.2                                                                                |                                                                                     |                                                                                     | 87.2                                                                                | 87.2                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.12                                                                              |                                                                                   |                                                                                   | 0.12                                                                              | 0.12                                                                              | 0.73                                                                               | 0.73                                                                                |                                                                                     |                                                                                     | 0.73                                                                                | 0.73                                                                                |
| v/c Ratio               |                                                                                   | 0.50                                                                              |                                                                                   |                                                                                   | 0.58                                                                              | 0.37                                                                              | 0.17                                                                               | 0.33                                                                                |                                                                                     |                                                                                     | 0.41                                                                                | 0.63                                                                                |
| Control Delay           |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 65.2                                                                              | 11.8                                                                              | 7.9                                                                                | 6.1                                                                                 |                                                                                     |                                                                                     | 4.6                                                                                 | 4.5                                                                                 |
| Queue Delay             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.4                                                                                 |
| Total Delay             |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 65.2                                                                              | 11.8                                                                              | 7.9                                                                                | 6.1                                                                                 |                                                                                     |                                                                                     | 4.6                                                                                 | 4.9                                                                                 |
| LOS                     |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | E                                                                                 | B                                                                                 | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | A                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 31.6                                                                              |                                                                                   |                                                                                   | 35.1                                                                              |                                                                                   |                                                                                    | 6.2                                                                                 |                                                                                     |                                                                                     |                                                                                     | 4.9                                                                                 |
| Approach LOS            |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   |                                                                                   | 11.6                                                                              |                                                                                   |                                                                                   | 16.9                                                                              | 0.0                                                                               | 2.0                                                                                | 38.3                                                                                |                                                                                     |                                                                                     | 2.0                                                                                 | 16.0                                                                                |
| Queue Length 95th (m)   |                                                                                   | 26.0                                                                              |                                                                                   |                                                                                   | 29.2                                                                              | 13.2                                                                              | m6.0                                                                               | 40.4                                                                                |                                                                                     |                                                                                     | m3.6                                                                                | m22.5                                                                               |
| Internal Link Dist (m)  |                                                                                   | 108.0                                                                             |                                                                                   |                                                                                   | 128.6                                                                             |                                                                                   |                                                                                    | 116.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 118.7                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | 70.0                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 338                                                                               |                                                                                   |                                                                                   | 222                                                                               | 392                                                                               | 153                                                                                | 3651                                                                                |                                                                                     |                                                                                     | 287                                                                                 | 2543                                                                                |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 416                                                                                 |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.35                                                                              |                                                                                   |                                                                                   | 0.36                                                                              | 0.26                                                                              | 0.17                                                                               | 0.33                                                                                |                                                                                     |                                                                                     | 0.41                                                                                | 0.76                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 22 (18%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 8.0

Intersection LOS: A

Intersection Capacity Utilization 86.6%

ICU Level of Service E

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 8: Terry Fox & Sobey's



|                         |     |     |
|-------------------------|-----|-----|
| Lane Group              | SBR | Ø9  |
| Switch Phase            |     |     |
| Minimum Initial (s)     |     | 3.0 |
| Minimum Split (s)       |     | 5.0 |
| Total Split (s)         |     | 5.0 |
| Total Split (%)         |     | 4%  |
| Maximum Green (s)       |     | 3.0 |
| Yellow Time (s)         |     | 2.0 |
| All-Red Time (s)        |     | 0.0 |
| Lost Time Adjust (s)    |     |     |
| Total Lost Time (s)     |     |     |
| Lead/Lag                |     |     |
| Lead-Lag Optimize?      |     |     |
| Vehicle Extension (s)   |     | 3.0 |
| Recall Mode             |     | Max |
| Walk Time (s)           |     |     |
| Flash Dont Walk (s)     |     |     |
| Pedestrian Calls (#/hr) |     |     |
| Act Effct Green (s)     |     |     |
| Actuated g/C Ratio      |     |     |
| v/c Ratio               |     |     |
| Control Delay           |     |     |
| Queue Delay             |     |     |
| Total Delay             |     |     |
| LOS                     |     |     |
| Approach Delay          |     |     |
| Approach LOS            |     |     |
| Queue Length 50th (m)   |     |     |
| Queue Length 95th (m)   |     |     |
| Internal Link Dist (m)  |     |     |
| Turn Bay Length (m)     |     |     |
| Base Capacity (vph)     |     |     |
| Starvation Cap Reductn  |     |     |
| Spillback Cap Reductn   |     |     |
| Storage Cap Reductn     |     |     |
| Reduced v/c Ratio       |     |     |
| Intersection Summary    |     |     |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |   |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                  | 1108                                                                                | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1483                                                                                |
| Future Volume (vph)        | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                  | 1108                                                                                | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1483                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 15.0                                                                              |                                                                                   | 0.0                                                                               | 25.0                                                                              |                                                                                   | 0.0                                                                               | 65.0                                                                                |                                                                                     | 0.0                                                                                 |                                                                                     | 120.0                                                                               |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 20.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 35.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 30.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 0.99                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   |                                                                                     | 1.00                                                                                |                                                                                     |                                                                                     | 1.00                                                                                |                                                                                     |
| Frt                        |                                                                                   | 0.925                                                                             |                                                                                   |                                                                                   | 0.872                                                                             |                                                                                   |                                                                                     | 0.996                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1701                                                                              | 1701                                                                              | 0                                                                                 | 1768                                                                              | 1598                                                                              | 0                                                                                 | 1768                                                                                | 3516                                                                                | 0                                                                                   | 0                                                                                   | 1768                                                                                | 3537                                                                                |
| Flt Permitted              | 0.629                                                                             |                                                                                   |                                                                                   | 0.748                                                                             |                                                                                   |                                                                                   | 0.150                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.230                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1120                                                                              | 1701                                                                              | 0                                                                                 | 1376                                                                              | 1598                                                                              | 0                                                                                 | 279                                                                                 | 3516                                                                                | 0                                                                                   | 0                                                                                   | 426                                                                                 | 3537                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 7                                                                                 |                                                                                   |                                                                                   | 94                                                                                |                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 40                                                                                |                                                                                   |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 65.4                                                                              |                                                                                   |                                                                                   | 381.2                                                                             |                                                                                   |                                                                                     | 479.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 200.7                                                                               |
| Travel Time (s)            |                                                                                   | 4.7                                                                               |                                                                                   |                                                                                   | 34.3                                                                              |                                                                                   |                                                                                     | 24.7                                                                                |                                                                                     |                                                                                     |                                                                                     | 10.3                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                 | 10                                                                                  |                                                                                     | 14                                                                                  |                                                                                     | 14                                                                                  |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 5%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 23                                                                                | 7                                                                                 | 7                                                                                 | 48                                                                                | 17                                                                                | 97                                                                                | 12                                                                                  | 1108                                                                                | 34                                                                                  | 2                                                                                   | 139                                                                                 | 1483                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 23                                                                                | 14                                                                                | 0                                                                                 | 48                                                                                | 114                                                                               | 0                                                                                 | 12                                                                                  | 1142                                                                                | 0                                                                                   | 0                                                                                   | 141                                                                                 | 1483                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | Right                                                                             | L NA                                                                              | Left                                                                              | R NA                                                                              | Left                                                                                | Left                                                                                | Right                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                             | CI+Ex                                                                             |                                                                                   | CI+Ex                                                                               | CI+Ex                                                                               |                                                                                     | CI+Ex                                                                               | CI+Ex                                                                               | CI+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                   | CI+Ex                                                                             |                                                                                   |                                                                                     | CI+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | CI+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | Perm                                                                                | Perm                                                                                | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 6                                                                                   | 6                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        |       |
| Traffic Volume (vph)       | 44    |
| Future Volume (vph)        | 44    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 55.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.95  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1582  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1508  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 41    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 10    |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 1%    |
| Adj. Flow (vph)            | 44    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 44    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | Cl+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 10.0                                                                                | 10.0                                                                                | 10.0                                                                                |
| Minimum Split (s)       | 36.0                                                                              | 36.0                                                                              |                                                                                   | 36.0                                                                              | 36.0                                                                              |                                                                                   | 28.3                                                                               | 28.3                                                                                |                                                                                     | 28.3                                                                                | 28.3                                                                                | 28.3                                                                                |
| Total Split (s)         | 38.0                                                                              | 38.0                                                                              |                                                                                   | 38.0                                                                              | 38.0                                                                              |                                                                                   | 82.0                                                                               | 82.0                                                                                |                                                                                     | 82.0                                                                                | 82.0                                                                                | 82.0                                                                                |
| Total Split (%)         | 31.7%                                                                             | 31.7%                                                                             |                                                                                   | 31.7%                                                                             | 31.7%                                                                             |                                                                                   | 68.3%                                                                              | 68.3%                                                                               |                                                                                     | 68.3%                                                                               | 68.3%                                                                               | 68.3%                                                                               |
| Maximum Green (s)       | 32.0                                                                              | 32.0                                                                              |                                                                                   | 32.0                                                                              | 32.0                                                                              |                                                                                   | 75.7                                                                               | 75.7                                                                                |                                                                                     | 75.7                                                                                | 75.7                                                                                | 75.7                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.7                                                                               | 2.7                                                                               |                                                                                   | 2.1                                                                                | 2.1                                                                                 |                                                                                     | 2.1                                                                                 | 2.1                                                                                 | 2.1                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.0                                                                               | 6.0                                                                               |                                                                                   | 6.3                                                                                | 6.3                                                                                 |                                                                                     |                                                                                     | 6.3                                                                                 | 6.3                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | C-Max                                                                               | C-Max                                                                               | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 15.0                                                                               | 15.0                                                                                |                                                                                     | 15.0                                                                                | 15.0                                                                                | 15.0                                                                                |
| Pedestrian Calls (#/hr) | 10                                                                                | 10                                                                                |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 14                                                                                 | 14                                                                                  |                                                                                     | 10                                                                                  | 10                                                                                  | 10                                                                                  |
| Act Effct Green (s)     | 14.3                                                                              | 14.3                                                                              |                                                                                   | 14.3                                                                              | 14.3                                                                              |                                                                                   | 93.4                                                                               | 93.4                                                                                |                                                                                     |                                                                                     | 93.4                                                                                | 93.4                                                                                |
| Actuated g/C Ratio      | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.12                                                                              | 0.12                                                                              |                                                                                   | 0.78                                                                               | 0.78                                                                                |                                                                                     |                                                                                     | 0.78                                                                                | 0.78                                                                                |
| v/c Ratio               | 0.17                                                                              | 0.07                                                                              |                                                                                   | 0.29                                                                              | 0.42                                                                              |                                                                                   | 0.06                                                                               | 0.42                                                                                |                                                                                     |                                                                                     | 0.43                                                                                | 0.54                                                                                |
| Control Delay           | 46.9                                                                              | 29.7                                                                              |                                                                                   | 50.1                                                                              | 17.0                                                                              |                                                                                   | 5.9                                                                                | 5.8                                                                                 |                                                                                     |                                                                                     | 17.5                                                                                | 14.6                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 46.9                                                                              | 29.7                                                                              |                                                                                   | 50.1                                                                              | 17.0                                                                              |                                                                                   | 5.9                                                                                | 5.8                                                                                 |                                                                                     |                                                                                     | 17.5                                                                                | 14.6                                                                                |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | B                                                                                 |                                                                                   | A                                                                                  | A                                                                                   |                                                                                     |                                                                                     | B                                                                                   | B                                                                                   |
| Approach Delay          |                                                                                   | 40.4                                                                              |                                                                                   |                                                                                   | 26.8                                                                              |                                                                                   |                                                                                    | 5.8                                                                                 |                                                                                     |                                                                                     |                                                                                     | 14.6                                                                                |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | A                                                                                   |                                                                                     |                                                                                     |                                                                                     | B                                                                                   |
| Queue Length 50th (m)   | 4.8                                                                               | 1.4                                                                               |                                                                                   | 10.1                                                                              | 4.1                                                                               |                                                                                   | 0.4                                                                                | 28.1                                                                                |                                                                                     |                                                                                     | 18.6                                                                                | 104.9                                                                               |
| Queue Length 95th (m)   | 10.2                                                                              | 6.0                                                                               |                                                                                   | 17.4                                                                              | 16.5                                                                              |                                                                                   | 3.2                                                                                | 76.4                                                                                |                                                                                     |                                                                                     | 35.1                                                                                | 135.5                                                                               |
| Internal Link Dist (m)  |                                                                                   | 41.4                                                                              |                                                                                   |                                                                                   | 357.2                                                                             |                                                                                   |                                                                                    | 455.4                                                                               |                                                                                     |                                                                                     |                                                                                     | 176.7                                                                               |
| Turn Bay Length (m)     | 15.0                                                                              |                                                                                   |                                                                                   | 25.0                                                                              |                                                                                   |                                                                                   | 65.0                                                                               |                                                                                     |                                                                                     |                                                                                     | 120.0                                                                               |                                                                                     |
| Base Capacity (vph)     | 298                                                                               | 458                                                                               |                                                                                   | 366                                                                               | 495                                                                               |                                                                                   | 217                                                                                | 2738                                                                                |                                                                                     |                                                                                     | 331                                                                                 | 2754                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.08                                                                              | 0.03                                                                              |                                                                                   | 0.13                                                                              | 0.23                                                                              |                                                                                   | 0.06                                                                               | 0.42                                                                                |                                                                                     |                                                                                     | 0.43                                                                                | 0.54                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 115 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.54

Intersection Signal Delay: 12.2

Intersection LOS: B

Intersection Capacity Utilization 80.2%

ICU Level of Service D

Analysis Period (min) 15

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 9: Terry Fox & Halkirk/Winchester



|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 28.3  |
| Total Split (s)         | 82.0  |
| Total Split (%)         | 68.3% |
| Maximum Green (s)       | 75.7  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.1   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.3   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 15.0  |
| Pedestrian Calls (#/hr) | 10    |
| Act Effct Green (s)     | 93.4  |
| Actuated g/C Ratio      | 0.78  |
| v/c Ratio               | 0.04  |
| Control Delay           | 5.6   |
| Queue Delay             | 0.0   |
| Total Delay             | 5.6   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 1.5   |
| Queue Length 95th (m)   | m5.8  |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 55.0  |
| Base Capacity (vph)     | 1183  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.04  |
| Intersection Summary    |       |

|                                         |  |  |  |  |  |  |
|-----------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                              | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | NBL                                                                               | NBR                                                                               |
| Lane Configurations                     |  |                                                                                   |  |  |  |                                                                                   |
| Traffic Volume (vph)                    | 1472                                                                              | 7                                                                                 | 34                                                                                | 1878                                                                              | 5                                                                                 | 23                                                                                |
| Future Volume (vph)                     | 1472                                                                              | 7                                                                                 | 34                                                                                | 1878                                                                              | 5                                                                                 | 23                                                                                |
| Ideal Flow (vphpl)                      | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)                      |                                                                                   | 0.0                                                                               | 85.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                               |
| Storage Lanes                           |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 1                                                                                 | 0                                                                                 |
| Taper Length (m)                        |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   | 10.0                                                                              |                                                                                   |
| Lane Util. Factor                       | 0.95                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 1.00                                                                              | 1.00                                                                              |
| Ped Bike Factor                         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Frt                                     | 0.999                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.889                                                                             |                                                                                   |
| Flt Protected                           |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   | 0.991                                                                             |                                                                                   |
| Satd. Flow (prot)                       | 3498                                                                              | 0                                                                                 | 1751                                                                              | 3502                                                                              | 1624                                                                              | 0                                                                                 |
| Flt Permitted                           |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   | 0.991                                                                             |                                                                                   |
| Satd. Flow (perm)                       | 3498                                                                              | 0                                                                                 | 1751                                                                              | 3502                                                                              | 1624                                                                              | 0                                                                                 |
| Link Speed (k/h)                        | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                | 50                                                                                |                                                                                   |
| Link Distance (m)                       | 150.7                                                                             |                                                                                   |                                                                                   | 644.5                                                                             | 279.6                                                                             |                                                                                   |
| Travel Time (s)                         | 10.9                                                                              |                                                                                   |                                                                                   | 46.4                                                                              | 20.1                                                                              |                                                                                   |
| Confl. Peds. (#/hr)                     |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   |
| Peak Hour Factor                        | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Adj. Flow (vph)                         | 1472                                                                              | 7                                                                                 | 34                                                                                | 1878                                                                              | 5                                                                                 | 23                                                                                |
| Shared Lane Traffic (%)                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)                   | 1479                                                                              | 0                                                                                 | 34                                                                                | 1878                                                                              | 28                                                                                | 0                                                                                 |
| Enter Blocked Intersection              | No                                                                                | No                                                                                | Yes                                                                               | Yes                                                                               | No                                                                                | No                                                                                |
| Lane Alignment                          | Left                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)                         | 8.0                                                                               |                                                                                   |                                                                                   | 8.0                                                                               | 4.0                                                                               |                                                                                   |
| Link Offset(m)                          | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)                      | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane                  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor                          | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)                     |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 24                                                                                | 14                                                                                |
| Sign Control                            | Free                                                                              |                                                                                   |                                                                                   | Free                                                                              | Stop                                                                              |                                                                                   |
| Intersection Summary                    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Area Type:                              | Other                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Control Type:                           | Unsignalized                                                                      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Intersection Capacity Utilization 64.8% | ICU Level of Service C                                                            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |
| Analysis Period (min) 15                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Total Traffic (optimized timing)

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 7                                                                                 | 305                                                                               | 997                                                                               | 204                                                                               | 5                                                                                 | 154                                                                               | 464                                                                                | 211                                                                                 | 209                                                                                 | 878                                                                                 | 307                                                                                 | 209                                                                                 |
| Future Volume (vph)        | 7                                                                                 | 305                                                                               | 997                                                                               | 204                                                                               | 5                                                                                 | 154                                                                               | 464                                                                                | 211                                                                                 | 209                                                                                 | 878                                                                                 | 307                                                                                 | 209                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     | 75.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.98                                                                              |                                                                                   | 1.00                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 1.00                                                                                |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3213                                                                              | 3468                                                                              | 1508                                                                              | 0                                                                                 | 3398                                                                              | 3435                                                                               | 1537                                                                                | 3300                                                                                | 3468                                                                                | 1567                                                                                | 3179                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3203                                                                              | 3468                                                                              | 1479                                                                              | 0                                                                                 | 3393                                                                              | 3435                                                                               | 1504                                                                                | 3284                                                                                | 3468                                                                                | 1538                                                                                | 3170                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 204                                                                               |                                                                                   |                                                                                   |                                                                                    | 228                                                                                 |                                                                                     |                                                                                     | 228                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 644.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 38.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                    | 4                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 8%                                                                                | 3%                                                                                | 6%                                                                                | 1%                                                                                | 2%                                                                                | 4%                                                                                 | 4%                                                                                  | 5%                                                                                  | 3%                                                                                  | 2%                                                                                  | 9%                                                                                  |
| Adj. Flow (vph)            | 7                                                                                 | 305                                                                               | 997                                                                               | 204                                                                               | 5                                                                                 | 154                                                                               | 464                                                                                | 211                                                                                 | 209                                                                                 | 878                                                                                 | 307                                                                                 | 209                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 312                                                                               | 997                                                                               | 204                                                                               | 0                                                                                 | 159                                                                               | 464                                                                                | 211                                                                                 | 209                                                                                 | 878                                                                                 | 307                                                                                 | 209                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Total Traffic (optimized timing)

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 510   | 371   |
| Future Volume (vph)        | 510   | 371   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 200.0 |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3402  | 1508  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3402  | 1481  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 232   |
| Link Speed (k/h)           | 70    |       |
| Link Distance (m)          | 316.2 |       |
| Travel Time (s)            | 16.3  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Confl. Bikes (#/hr)        |       |       |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 5%    | 6%    |
| Adj. Flow (vph)            | 510   | 371   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 510   | 371   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | Right |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | Cl+Ex | Cl+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | Cl+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 6     |       |
| Permitted Phases           |       | 6     |
| Detector Phase             | 6     | 6     |

4: Terry Fox & Hazeldean  
AM Peak Hour

560 Hazeldean Road  
2036 Total Traffic (optimized timing)

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                                | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 21.0                                                                              | 21.0                                                                              | 43.0                                                                              | 43.0                                                                              | 14.0                                                                              | 14.0                                                                              | 36.0                                                                                | 36.0                                                                                | 17.0                                                                                | 36.0                                                                                | 36.0                                                                                | 17.0                                                                                |
| Total Split (%)         | 19.1%                                                                             | 19.1%                                                                             | 39.1%                                                                             | 39.1%                                                                             | 12.7%                                                                             | 12.7%                                                                             | 32.7%                                                                               | 32.7%                                                                               | 15.5%                                                                               | 32.7%                                                                               | 32.7%                                                                               | 15.5%                                                                               |
| Maximum Green (s)       | 14.5                                                                              | 14.5                                                                              | 36.5                                                                              | 36.5                                                                              | 7.5                                                                               | 7.5                                                                               | 29.5                                                                                | 29.5                                                                                | 10.5                                                                                | 29.5                                                                                | 29.5                                                                                | 10.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                 | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                                | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                                | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 13.9                                                                              | 35.2                                                                              | 35.2                                                                              |                                                                                   | 7.5                                                                               | 28.8                                                                                | 28.8                                                                                | 10.2                                                                                | 31.0                                                                                | 31.0                                                                                | 10.3                                                                                |
| Actuated g/C Ratio      |                                                                                   | 0.13                                                                              | 0.32                                                                              | 0.32                                                                              |                                                                                   | 0.07                                                                              | 0.26                                                                                | 0.26                                                                                | 0.09                                                                                | 0.28                                                                                | 0.28                                                                                | 0.09                                                                                |
| v/c Ratio               |                                                                                   | 0.77                                                                              | 0.90                                                                              | 0.33                                                                              |                                                                                   | 0.69                                                                              | 0.52                                                                                | 0.38                                                                                | 0.68                                                                                | 0.90                                                                                | 0.51                                                                                | 0.70                                                                                |
| Control Delay           |                                                                                   | 60.0                                                                              | 47.5                                                                              | 5.3                                                                               |                                                                                   | 60.5                                                                              | 39.5                                                                                | 13.9                                                                                | 65.6                                                                                | 43.0                                                                                | 8.6                                                                                 | 55.8                                                                                |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 60.0                                                                              | 47.5                                                                              | 5.3                                                                               |                                                                                   | 60.5                                                                              | 39.5                                                                                | 13.9                                                                                | 65.6                                                                                | 43.0                                                                                | 8.6                                                                                 | 55.8                                                                                |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | A                                                                                 |                                                                                   | E                                                                                 | D                                                                                   | B                                                                                   | E                                                                                   | D                                                                                   | A                                                                                   | E                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 44.4                                                                              |                                                                                   |                                                                                   |                                                                                   | 37.0                                                                                |                                                                                     |                                                                                     | 38.8                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 31.0                                                                              | 96.6                                                                              | 0.0                                                                               |                                                                                   | 16.2                                                                              | 45.1                                                                                | 4.1                                                                                 | 14.3                                                                                | 90.2                                                                                | 24.5                                                                                | 20.9                                                                                |
| Queue Length 95th (m)   |                                                                                   | #45.3                                                                             | #123.5                                                                            | 14.1                                                                              |                                                                                   | #28.6                                                                             | 62.4                                                                                | 32.9                                                                                | 34.2                                                                                | #124.1                                                                              | 7.2                                                                                 | #33.9                                                                               |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 620.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                               |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                     | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                | 155.0                                                                               |
| Base Capacity (vph)     |                                                                                   | 423                                                                               | 1150                                                                              | 627                                                                               |                                                                                   | 231                                                                               | 921                                                                                 | 570                                                                                 | 317                                                                                 | 977                                                                                 | 597                                                                                 | 306                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.74                                                                              | 0.87                                                                              | 0.33                                                                              |                                                                                   | 0.69                                                                              | 0.50                                                                                | 0.37                                                                                | 0.66                                                                                | 0.90                                                                                | 0.51                                                                                | 0.68                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 76 (69%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 95

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 39.7

Intersection LOS: D

Intersection Capacity Utilization 87.5%

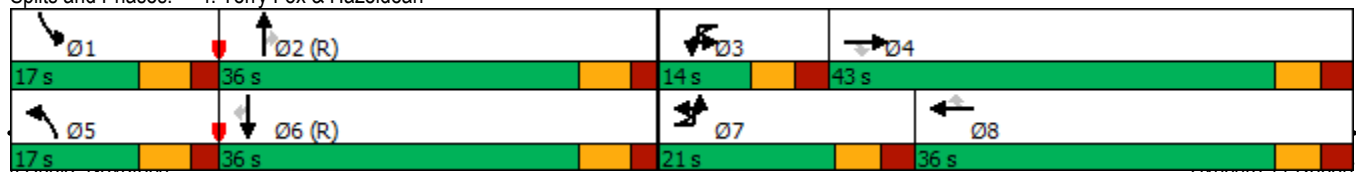
ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean





| Lane Group              | SBT   | SBR   |
|-------------------------|-------|-------|
| Switch Phase            |       |       |
| Minimum Initial (s)     | 10.0  | 10.0  |
| Minimum Split (s)       | 35.5  | 35.5  |
| Total Split (s)         | 36.0  | 36.0  |
| Total Split (%)         | 32.7% | 32.7% |
| Maximum Green (s)       | 29.5  | 29.5  |
| Yellow Time (s)         | 4.2   | 4.2   |
| All-Red Time (s)        | 2.3   | 2.3   |
| Lost Time Adjust (s)    | 0.0   | 0.0   |
| Total Lost Time (s)     | 6.5   | 6.5   |
| Lead/Lag                | Lag   | Lag   |
| Lead-Lag Optimize?      |       |       |
| Vehicle Extension (s)   | 3.0   | 3.0   |
| Recall Mode             | C-Max | C-Max |
| Walk Time (s)           | 7.0   | 7.0   |
| Flash Dont Walk (s)     | 22.0  | 22.0  |
| Pedestrian Calls (#/hr) | 5     | 5     |
| Act Effct Green (s)     | 31.1  | 31.1  |
| Actuated g/C Ratio      | 0.28  | 0.28  |
| v/c Ratio               | 0.53  | 0.64  |
| Control Delay           | 36.6  | 25.4  |
| Queue Delay             | 0.0   | 0.0   |
| Total Delay             | 36.6  | 25.4  |
| LOS                     | D     | C     |
| Approach Delay          | 36.5  |       |
| Approach LOS            | D     |       |
| Queue Length 50th (m)   | 49.3  | 36.1  |
| Queue Length 95th (m)   | 67.0  | 79.5  |
| Internal Link Dist (m)  | 292.2 |       |
| Turn Bay Length (m)     |       | 200.0 |
| Base Capacity (vph)     | 962   | 584   |
| Starvation Cap Reductn  | 0     | 0     |
| Spillback Cap Reductn   | 0     | 0     |
| Storage Cap Reductn     | 0     | 0     |
| Reduced v/c Ratio       | 0.53  | 0.64  |
| Intersection Summary    |       |       |



6: Terry Fox & Charlie Rogers/Edgewater  
AM Peak Hour

560 Hazeldean Road  
2036 Total Traffic (optimized timing)

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Configurations        |  |  |                                                                                   |  |  |                                                                                   |   |  |                                                                                     |                                                                                     |  |  |
| Traffic Volume (vph)       | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                   | 1578                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1138                                                                                |
| Future Volume (vph)        | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                   | 1578                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1138                                                                                |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         | 0.0                                                                               |                                                                                   | 0.0                                                                               | 65.0                                                                              |                                                                                   | 0.0                                                                               | 0.0                                                                                 |                                                                                     | 0.0                                                                                 |                                                                                     | 55.0                                                                                |                                                                                     |
| Storage Lanes              | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                 |                                                                                   | 0                                                                                 | 1                                                                                   |                                                                                     | 0                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           | 10.0                                                                              |                                                                                   |                                                                                   | 40.0                                                                              |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 40.0                                                                                |                                                                                     |
| Lane Util. Factor          | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 0.95                                                                                | 0.95                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            | 1.00                                                                              | 0.99                                                                              |                                                                                   | 0.99                                                                              | 0.98                                                                              |                                                                                   | 1.00                                                                                | 1.00                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Frt                        |                                                                                   | 0.887                                                                             |                                                                                   |                                                                                   | 0.853                                                                             |                                                                                   |                                                                                     | 0.997                                                                               |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |
| Satd. Flow (prot)          | 1768                                                                              | 1317                                                                              | 0                                                                                 | 1567                                                                              | 1516                                                                              | 0                                                                                 | 1768                                                                                | 3489                                                                                | 0                                                                                   | 0                                                                                   | 1734                                                                                | 3402                                                                                |
| Flt Permitted              | 0.693                                                                             |                                                                                   |                                                                                   | 0.755                                                                             |                                                                                   |                                                                                   | 0.250                                                                               |                                                                                     |                                                                                     |                                                                                     | 0.065                                                                               |                                                                                     |
| Satd. Flow (perm)          | 1284                                                                              | 1317                                                                              | 0                                                                                 | 1238                                                                              | 1516                                                                              | 0                                                                                 | 464                                                                                 | 3489                                                                                | 0                                                                                   | 0                                                                                   | 119                                                                                 | 3402                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   | Yes                                                                               |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   | 3                                                                                 |                                                                                   |                                                                                   | 89                                                                                |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Link Speed (k/h)           |                                                                                   | 50                                                                                |                                                                                   |                                                                                   | 50                                                                                |                                                                                   |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |                                                                                     | 70                                                                                  |
| Link Distance (m)          |                                                                                   | 217.1                                                                             |                                                                                   |                                                                                   | 282.1                                                                             |                                                                                   |                                                                                     | 253.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 360.0                                                                               |
| Travel Time (s)            |                                                                                   | 15.6                                                                              |                                                                                   |                                                                                   | 20.3                                                                              |                                                                                   |                                                                                     | 13.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 18.5                                                                                |
| Confl. Peds. (#/hr)        | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     | 5                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 33%                                                                               | 14%                                                                               | 50%                                                                               | 3%                                                                                | 1%                                                                                  | 2%                                                                                  | 3%                                                                                  | 1%                                                                                  | 3%                                                                                  | 5%                                                                                  |
| Adj. Flow (vph)            | 14                                                                                | 1                                                                                 | 3                                                                                 | 14                                                                                | 2                                                                                 | 97                                                                                | 1                                                                                   | 1578                                                                                | 30                                                                                  | 1                                                                                   | 160                                                                                 | 1138                                                                                |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 14                                                                                | 4                                                                                 | 0                                                                                 | 14                                                                                | 99                                                                                | 0                                                                                 | 1                                                                                   | 1608                                                                                | 0                                                                                   | 0                                                                                   | 161                                                                                 | 1138                                                                                |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                |
| Median Width(m)            |                                                                                   | 4.0                                                                               |                                                                                   |                                                                                   | 6.0                                                                               |                                                                                   |                                                                                     | 14.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 8.0                                                                                 |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 5.0                                                                                 |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  | 24                                                                                  |                                                                                     |
| Number of Detectors        | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 2                                                                                   |
| Detector Template          | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                                | Thru                                                                                |                                                                                     | Left                                                                                | Left                                                                                | Thru                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                                 | 10.0                                                                                |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                                 | 0.6                                                                                 |                                                                                     | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                               | Cl+Ex                                                                               |                                                                                     | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |                                                                                     | 9.4                                                                                 |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.6                                                                                 |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |                                                                                     | Cl+Ex                                                                               |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 0.0                                                                                 |
| Turn Type                  | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                              | NA                                                                                |                                                                                   | Perm                                                                                | NA                                                                                  |                                                                                     | pm+pt                                                                               | pm+pt                                                                               | NA                                                                                  |
| Protected Phases           |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                     | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Permitted Phases           | 4                                                                                 |                                                                                   |                                                                                   | 8                                                                                 |                                                                                   |                                                                                   | 2                                                                                   |                                                                                     |                                                                                     | 6                                                                                   | 6                                                                                   |                                                                                     |
| Detector Phase             | 4                                                                                 | 4                                                                                 |                                                                                   | 8                                                                                 | 8                                                                                 |                                                                                   | 2                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   | 1                                                                                   | 6                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            |       |
|----------------------------|-------|
| Lane Group                 | SBR   |
| Lane Configurations        | RT    |
| Traffic Volume (vph)       | 12    |
| Future Volume (vph)        | 12    |
| Ideal Flow (vphpl)         | 1800  |
| Storage Length (m)         | 45.0  |
| Storage Lanes              | 1     |
| Taper Length (m)           |       |
| Lane Util. Factor          | 1.00  |
| Ped Bike Factor            | 0.97  |
| Frt                        | 0.850 |
| Flt Protected              |       |
| Satd. Flow (prot)          | 1480  |
| Flt Permitted              |       |
| Satd. Flow (perm)          | 1436  |
| Right Turn on Red          | Yes   |
| Satd. Flow (RTOR)          | 35    |
| Link Speed (k/h)           |       |
| Link Distance (m)          |       |
| Travel Time (s)            |       |
| Confl. Peds. (#/hr)        | 5     |
| Peak Hour Factor           | 1.00  |
| Heavy Vehicles (%)         | 8%    |
| Adj. Flow (vph)            | 12    |
| Shared Lane Traffic (%)    |       |
| Lane Group Flow (vph)      | 12    |
| Enter Blocked Intersection | No    |
| Lane Alignment             | R NA  |
| Median Width(m)            |       |
| Link Offset(m)             |       |
| Crosswalk Width(m)         |       |
| Two way Left Turn Lane     |       |
| Headway Factor             | 1.01  |
| Turning Speed (k/h)        | 14    |
| Number of Detectors        | 1     |
| Detector Template          | Right |
| Leading Detector (m)       | 2.0   |
| Trailing Detector (m)      | 0.0   |
| Detector 1 Position(m)     | 0.0   |
| Detector 1 Size(m)         | 2.0   |
| Detector 1 Type            | CI+Ex |
| Detector 1 Channel         |       |
| Detector 1 Extend (s)      | 0.0   |
| Detector 1 Queue (s)       | 0.0   |
| Detector 1 Delay (s)       | 0.0   |
| Detector 2 Position(m)     |       |
| Detector 2 Size(m)         |       |
| Detector 2 Type            |       |
| Detector 2 Channel         |       |
| Detector 2 Extend (s)      |       |
| Turn Type                  | Perm  |
| Protected Phases           |       |
| Permitted Phases           | 6     |
| Detector Phase             | 6     |
| Switch Phase               |       |

6: Terry Fox & Charlie Rogers/Edgewater  
AM Peak Hour

560 Hazeldean Road  
2036 Total Traffic (optimized timing)

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Minimum Initial (s)     | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                              | 10.0                                                                              |                                                                                   | 10.0                                                                               | 10.0                                                                                |                                                                                     | 5.0                                                                                 | 5.0                                                                                 | 10.0                                                                                |
| Minimum Split (s)       | 36.5                                                                              | 36.5                                                                              |                                                                                   | 36.5                                                                              | 36.5                                                                              |                                                                                   | 34.5                                                                               | 34.5                                                                                |                                                                                     | 11.5                                                                                | 11.5                                                                                | 34.5                                                                                |
| Total Split (s)         | 37.0                                                                              | 37.0                                                                              |                                                                                   | 37.0                                                                              | 37.0                                                                              |                                                                                   | 61.0                                                                               | 61.0                                                                                |                                                                                     | 12.0                                                                                | 12.0                                                                                | 73.0                                                                                |
| Total Split (%)         | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 33.6%                                                                             | 33.6%                                                                             |                                                                                   | 55.5%                                                                              | 55.5%                                                                               |                                                                                     | 10.9%                                                                               | 10.9%                                                                               | 66.4%                                                                               |
| Maximum Green (s)       | 30.5                                                                              | 30.5                                                                              |                                                                                   | 30.5                                                                              | 30.5                                                                              |                                                                                   | 54.5                                                                               | 54.5                                                                                |                                                                                     | 5.5                                                                                 | 5.5                                                                                 | 66.5                                                                                |
| Yellow Time (s)         | 3.3                                                                               | 3.3                                                                               |                                                                                   | 3.3                                                                               | 3.3                                                                               |                                                                                   | 4.2                                                                                | 4.2                                                                                 |                                                                                     | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 3.2                                                                               | 3.2                                                                               |                                                                                   | 3.2                                                                               | 3.2                                                                               |                                                                                   | 2.3                                                                                | 2.3                                                                                 |                                                                                     | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                                | 6.5                                                                                 |                                                                                     |                                                                                     | 6.5                                                                                 | 6.5                                                                                 |
| Lead/Lag                |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   | Lag                                                                                | Lag                                                                                 |                                                                                     | Lead                                                                                | Lead                                                                                |                                                                                     |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                                | 3.0                                                                                 |                                                                                     | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              |                                                                                   | None                                                                              | None                                                                              |                                                                                   | C-Max                                                                              | C-Max                                                                               |                                                                                     | None                                                                                | None                                                                                | C-Max                                                                               |
| Walk Time (s)           | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     |                                                                                     |                                                                                     | 7.0                                                                                 |
| Flash Dont Walk (s)     | 23.0                                                                              | 23.0                                                                              |                                                                                   | 23.0                                                                              | 23.0                                                                              |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     |                                                                                     |                                                                                     | 21.0                                                                                |
| Pedestrian Calls (#/hr) | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                 | 5                                                                                 |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     |                                                                                     |                                                                                     | 5                                                                                   |
| Act Effct Green (s)     | 14.0                                                                              | 14.0                                                                              |                                                                                   | 14.0                                                                              | 14.0                                                                              |                                                                                   | 64.0                                                                               | 64.0                                                                                |                                                                                     |                                                                                     | 83.0                                                                                | 83.0                                                                                |
| Actuated g/C Ratio      | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.13                                                                              | 0.13                                                                              |                                                                                   | 0.58                                                                               | 0.58                                                                                |                                                                                     |                                                                                     | 0.75                                                                                | 0.75                                                                                |
| v/c Ratio               | 0.09                                                                              | 0.02                                                                              |                                                                                   | 0.09                                                                              | 0.37                                                                              |                                                                                   | 0.00                                                                               | 0.79                                                                                |                                                                                     |                                                                                     | 0.59                                                                                | 0.44                                                                                |
| Control Delay           | 39.2                                                                              | 25.5                                                                              |                                                                                   | 46.9                                                                              | 28.6                                                                              |                                                                                   | 8.0                                                                                | 14.9                                                                                |                                                                                     |                                                                                     | 28.6                                                                                | 6.7                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 39.2                                                                              | 25.5                                                                              |                                                                                   | 46.9                                                                              | 28.6                                                                              |                                                                                   | 8.0                                                                                | 14.9                                                                                |                                                                                     |                                                                                     | 28.6                                                                                | 6.7                                                                                 |
| LOS                     | D                                                                                 | C                                                                                 |                                                                                   | D                                                                                 | C                                                                                 |                                                                                   | A                                                                                  | B                                                                                   |                                                                                     |                                                                                     | C                                                                                   | A                                                                                   |
| Approach Delay          |                                                                                   | 36.2                                                                              |                                                                                   |                                                                                   | 30.8                                                                              |                                                                                   |                                                                                    | 14.9                                                                                |                                                                                     |                                                                                     |                                                                                     | 9.3                                                                                 |
| Approach LOS            |                                                                                   | D                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | B                                                                                   |                                                                                     |                                                                                     |                                                                                     | A                                                                                   |
| Queue Length 50th (m)   | 2.6                                                                               | 0.2                                                                               |                                                                                   | 2.5                                                                               | 7.8                                                                               |                                                                                   | 0.0                                                                                | 165.1                                                                               |                                                                                     |                                                                                     | 12.5                                                                                | 29.7                                                                                |
| Queue Length 95th (m)   | 6.6                                                                               | 2.6                                                                               |                                                                                   | m7.7                                                                              | 23.5                                                                              |                                                                                   | m0.1                                                                               | #48.8                                                                               |                                                                                     |                                                                                     | #57.4                                                                               | 80.7                                                                                |
| Internal Link Dist (m)  |                                                                                   | 193.1                                                                             |                                                                                   |                                                                                   | 258.1                                                                             |                                                                                   |                                                                                    | 229.3                                                                               |                                                                                     |                                                                                     |                                                                                     | 336.0                                                                               |
| Turn Bay Length (m)     |                                                                                   |                                                                                   |                                                                                   | 65.0                                                                              |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     | 55.0                                                                                |                                                                                     |
| Base Capacity (vph)     | 356                                                                               | 367                                                                               |                                                                                   | 343                                                                               | 484                                                                               |                                                                                   | 269                                                                                | 2032                                                                                |                                                                                     |                                                                                     | 272                                                                                 | 2566                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                  | 0                                                                                   |                                                                                     |                                                                                     | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.04                                                                              | 0.01                                                                              |                                                                                   | 0.04                                                                              | 0.20                                                                              |                                                                                   | 0.00                                                                               | 0.79                                                                                |                                                                                     |                                                                                     | 0.59                                                                                | 0.44                                                                                |

Intersection Summary

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 110

Offset: 14 (13%), Referenced to phase 2:NBT and 6:SBTL, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 13.2

Intersection LOS: B

Intersection Capacity Utilization 83.6%

ICU Level of Service E

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 6: Terry Fox & Charlie Rogers/Edgewater



0.0000, Nov 2000

Dynamic 1.1 Report

|                         |       |
|-------------------------|-------|
| Lane Group              | SBR   |
| Minimum Initial (s)     | 10.0  |
| Minimum Split (s)       | 34.5  |
| Total Split (s)         | 73.0  |
| Total Split (%)         | 66.4% |
| Maximum Green (s)       | 66.5  |
| Yellow Time (s)         | 4.2   |
| All-Red Time (s)        | 2.3   |
| Lost Time Adjust (s)    | 0.0   |
| Total Lost Time (s)     | 6.5   |
| Lead/Lag                |       |
| Lead-Lag Optimize?      |       |
| Vehicle Extension (s)   | 3.0   |
| Recall Mode             | C-Max |
| Walk Time (s)           | 7.0   |
| Flash Dont Walk (s)     | 21.0  |
| Pedestrian Calls (#/hr) | 5     |
| Act Effct Green (s)     | 83.0  |
| Actuated g/C Ratio      | 0.75  |
| v/c Ratio               | 0.01  |
| Control Delay           | 0.2   |
| Queue Delay             | 0.0   |
| Total Delay             | 0.2   |
| LOS                     | A     |
| Approach Delay          |       |
| Approach LOS            |       |
| Queue Length 50th (m)   | 0.0   |
| Queue Length 95th (m)   | 0.5   |
| Internal Link Dist (m)  |       |
| Turn Bay Length (m)     | 45.0  |
| Base Capacity (vph)     | 1092  |
| Starvation Cap Reductn  | 0     |
| Spillback Cap Reductn   | 0     |
| Storage Cap Reductn     | 0     |
| Reduced v/c Ratio       | 0.01  |
| Intersection Summary    |       |

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Lane Configurations        |                                                                                   |  |  |                                                                                   |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (vph)       | 2                                                                                 | 340                                                                               | 1209                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1371                                                                                | 122                                                                                 | 21                                                                                  | 304                                                                                 | 136                                                                                 | 140                                                                                 |
| Future Volume (vph)        | 2                                                                                 | 340                                                                               | 1209                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1371                                                                                | 122                                                                                 | 21                                                                                  | 304                                                                                 | 136                                                                                 | 140                                                                                 |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 100.0                                                                             |                                                                                   | 0.0                                                                               |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               | 100.0                                                                               |                                                                                     | 105.0                                                                               | 60.0                                                                                |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 0                                                                                 |                                                                                   | 2                                                                                 |                                                                                     | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   | 2                                                                                   |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 100.0                                                                             |                                                                                     |                                                                                     | 75.0                                                                                |                                                                                     |                                                                                     | 50.0                                                                                |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 0.95                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                                | 1.00                                                                                | 1.00                                                                                | 0.95                                                                                | 1.00                                                                                | 0.97                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   |                                                                                   | 1.00                                                                              |                                                                                     | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.98                                                                                | 0.99                                                                                |
| Frt                        |                                                                                   |                                                                                   | 0.997                                                                             |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (prot)          | 0                                                                                 | 3431                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3397                                                                              | 3537                                                                                | 1582                                                                                | 1751                                                                                | 3502                                                                                | 1567                                                                                | 3431                                                                                |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                     |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     | 0.950                                                                               |
| Satd. Flow (perm)          | 0                                                                                 | 3426                                                                              | 3490                                                                              | 0                                                                                 | 0                                                                                 | 3391                                                                              | 3537                                                                                | 1555                                                                                | 1746                                                                                | 3502                                                                                | 1539                                                                                | 3410                                                                                |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                     | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 2                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 128                                                                                 |                                                                                     |                                                                                     | 133                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                  |                                                                                     |                                                                                     | 50                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 568.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 297.5                                                                               |                                                                                     |                                                                                     | 263.2                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 34.1                                                                              |                                                                                   |                                                                                   |                                                                                   | 17.9                                                                                |                                                                                     |                                                                                     | 19.0                                                                                |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                   | 5                                                                                 |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 1%                                                                                | 2%                                                                                | 2%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                  | 1%                                                                                  | 2%                                                                                  | 2%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 340                                                                               | 1209                                                                              | 22                                                                                | 1                                                                                 | 184                                                                               | 1371                                                                                | 122                                                                                 | 21                                                                                  | 304                                                                                 | 136                                                                                 | 140                                                                                 |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 342                                                                               | 1231                                                                              | 0                                                                                 | 0                                                                                 | 185                                                                               | 1371                                                                                | 122                                                                                 | 21                                                                                  | 304                                                                                 | 136                                                                                 | 140                                                                                 |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                                | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | L NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 10.0                                                                                |                                                                                     |                                                                                     | 8.0                                                                                 |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                 |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 97                                                                                | 14                                                                                | 97                                                                                |                                                                                     | 14                                                                                  | 97                                                                                  |                                                                                     | 97                                                                                  | 24                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 2                                                                                   | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              |                                                                                   | Left                                                                              | Left                                                                              | Thru                                                                                | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              |                                                                                   | 2.0                                                                               | 2.0                                                                               | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               |                                                                                   | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |                                                                                   | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                 |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                 |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                               |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                 |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                |                                                                                   | Prot                                                                              | Prot                                                                              | NA                                                                                  | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   |                                                                                     | 3                                                                                   | 8                                                                                   |                                                                                     | 7                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     | 6                                                                                   |                                                                                     |                                                                                     | 8                                                                                   |                                                                                     |
| Detector Phase             | 5                                                                                 | 5                                                                                 | 2                                                                                 |                                                                                   | 1                                                                                 | 1                                                                                 | 6                                                                                   | 6                                                                                   | 3                                                                                   | 8                                                                                   | 8                                                                                   | 7                                                                                   |
| Switch Phase               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

|                            | ↓     | ↙     |
|----------------------------|-------|-------|
| Lane Group                 | SBT   | SBR   |
| Lane Configurations        | ↑↑    | ↑     |
| Traffic Volume (vph)       | 493   | 440   |
| Future Volume (vph)        | 493   | 440   |
| Ideal Flow (vphpl)         | 1800  | 1800  |
| Storage Length (m)         |       | 60.0  |
| Storage Lanes              |       | 1     |
| Taper Length (m)           |       |       |
| Lane Util. Factor          | 0.95  | 1.00  |
| Ped Bike Factor            |       | 0.98  |
| Frt                        |       | 0.850 |
| Flt Protected              |       |       |
| Satd. Flow (prot)          | 3502  | 1582  |
| Flt Permitted              |       |       |
| Satd. Flow (perm)          | 3502  | 1555  |
| Right Turn on Red          |       | Yes   |
| Satd. Flow (RTOR)          |       | 176   |
| Link Speed (k/h)           | 50    |       |
| Link Distance (m)          | 251.2 |       |
| Travel Time (s)            | 18.1  |       |
| Confl. Peds. (#/hr)        |       | 5     |
| Peak Hour Factor           | 1.00  | 1.00  |
| Heavy Vehicles (%)         | 2%    | 1%    |
| Adj. Flow (vph)            | 493   | 440   |
| Shared Lane Traffic (%)    |       |       |
| Lane Group Flow (vph)      | 493   | 440   |
| Enter Blocked Intersection | No    | No    |
| Lane Alignment             | Left  | R NA  |
| Median Width(m)            | 10.0  |       |
| Link Offset(m)             | 0.0   |       |
| Crosswalk Width(m)         | 5.0   |       |
| Two way Left Turn Lane     |       |       |
| Headway Factor             | 1.01  | 1.01  |
| Turning Speed (k/h)        |       | 14    |
| Number of Detectors        | 2     | 1     |
| Detector Template          | Thru  | Right |
| Leading Detector (m)       | 10.0  | 2.0   |
| Trailing Detector (m)      | 0.0   | 0.0   |
| Detector 1 Position(m)     | 0.0   | 0.0   |
| Detector 1 Size(m)         | 0.6   | 2.0   |
| Detector 1 Type            | CI+Ex | CI+Ex |
| Detector 1 Channel         |       |       |
| Detector 1 Extend (s)      | 0.0   | 0.0   |
| Detector 1 Queue (s)       | 0.0   | 0.0   |
| Detector 1 Delay (s)       | 0.0   | 0.0   |
| Detector 2 Position(m)     | 9.4   |       |
| Detector 2 Size(m)         | 0.6   |       |
| Detector 2 Type            | CI+Ex |       |
| Detector 2 Channel         |       |       |
| Detector 2 Extend (s)      | 0.0   |       |
| Turn Type                  | NA    | Perm  |
| Protected Phases           | 4     |       |
| Permitted Phases           |       | 4     |
| Detector Phase             | 4     | 4     |
| Switch Phase               |       |       |

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                 | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              |                                                                                   | 5.0                                                                               | 5.0                                                                               | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.1                                                                              | 11.1                                                                              | 41.1                                                                              |                                                                                   | 11.1                                                                              | 11.1                                                                              | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                | 41.1                                                                                | 41.1                                                                                | 11.1                                                                                |
| Total Split (s)         | 16.0                                                                              | 16.0                                                                              | 61.0                                                                              |                                                                                   | 15.0                                                                              | 15.0                                                                              | 60.0                                                                                | 60.0                                                                                | 12.0                                                                                | 42.0                                                                                | 42.0                                                                                | 12.0                                                                                |
| Total Split (%)         | 12.3%                                                                             | 12.3%                                                                             | 46.9%                                                                             |                                                                                   | 11.5%                                                                             | 11.5%                                                                             | 46.2%                                                                               | 46.2%                                                                               | 9.2%                                                                                | 32.3%                                                                               | 32.3%                                                                               | 9.2%                                                                                |
| Maximum Green (s)       | 9.9                                                                               | 9.9                                                                               | 54.9                                                                              |                                                                                   | 8.9                                                                               | 8.9                                                                               | 53.9                                                                                | 53.9                                                                                | 5.9                                                                                 | 35.9                                                                                | 35.9                                                                                | 5.9                                                                                 |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               |                                                                                   | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                 | 3.7                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 | 3.3                                                                                 |
| All-Red Time (s)        | 2.4                                                                               | 2.4                                                                               | 2.4                                                                               |                                                                                   | 2.4                                                                               | 2.4                                                                               | 2.4                                                                                 | 2.4                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 | 2.8                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Lost Time (s)     |                                                                                   | 6.1                                                                               | 6.1                                                                               |                                                                                   |                                                                                   | 6.1                                                                               | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 | 6.1                                                                                 |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               |                                                                                   | Lead                                                                              | Lead                                                                              | Lag                                                                                 | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               |                                                                                   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | C-Max                                                                             |                                                                                   | None                                                                              | None                                                                              | C-Max                                                                               | C-Max                                                                               | None                                                                                | None                                                                                | None                                                                                | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 7.0                                                                                 | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 28.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 28.0                                                                                | 28.0                                                                                |                                                                                     | 28.0                                                                                | 28.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 5                                                                                 |                                                                                   |                                                                                   |                                                                                   | 5                                                                                   | 5                                                                                   |                                                                                     | 5                                                                                   | 5                                                                                   |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 17.6                                                                              | 63.2                                                                              |                                                                                   |                                                                                   | 10.2                                                                              | 55.9                                                                                | 55.9                                                                                |                                                                                     | 5.8                                                                                 | 26.2                                                                                | 5.9                                                                                 |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.49                                                                              |                                                                                   |                                                                                   | 0.08                                                                              | 0.43                                                                                | 0.43                                                                                |                                                                                     | 0.04                                                                                | 0.20                                                                                | 0.05                                                                                |
| v/c Ratio               |                                                                                   | 0.74                                                                              | 0.72                                                                              |                                                                                   |                                                                                   | 0.69                                                                              | 0.90                                                                                | 0.16                                                                                |                                                                                     | 0.27                                                                                | 0.43                                                                                | 0.90                                                                                |
| Control Delay           |                                                                                   | 65.1                                                                              | 31.6                                                                              |                                                                                   |                                                                                   | 85.9                                                                              | 30.1                                                                                | 2.1                                                                                 |                                                                                     | 68.8                                                                                | 45.6                                                                                | 111.7                                                                               |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               |                                                                                   |                                                                                   | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             |                                                                                   | 65.1                                                                              | 31.6                                                                              |                                                                                   |                                                                                   | 85.9                                                                              | 30.1                                                                                | 2.1                                                                                 |                                                                                     | 68.8                                                                                | 45.6                                                                                | 111.7                                                                               |
| LOS                     |                                                                                   | E                                                                                 | C                                                                                 |                                                                                   |                                                                                   | F                                                                                 | C                                                                                   | A                                                                                   |                                                                                     | E                                                                                   | D                                                                                   | F                                                                                   |
| Approach Delay          |                                                                                   |                                                                                   | 38.8                                                                              |                                                                                   |                                                                                   |                                                                                   | 34.2                                                                                |                                                                                     |                                                                                     | 35.7                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | C                                                                                   |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 42.0                                                                              | 134.3                                                                             |                                                                                   |                                                                                   | 19.1                                                                              | 180.8                                                                               | 5.3                                                                                 |                                                                                     | 4.9                                                                                 | 31.2                                                                                | 17.2                                                                                |
| Queue Length 95th (m)   |                                                                                   | #81.1                                                                             | 161.5                                                                             |                                                                                   |                                                                                   | m#37.0                                                                            | #199.6                                                                              | m2.8                                                                                |                                                                                     | 13.1                                                                                | 41.8                                                                                | #35.4                                                                               |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 544.4                                                                             |                                                                                   |                                                                                   |                                                                                   | 273.5                                                                               |                                                                                     |                                                                                     | 239.2                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 50.0                                                                              |                                                                                     | 175.0                                                                               |                                                                                     | 100.0                                                                               |                                                                                     | 60.0                                                                                |
| Base Capacity (vph)     |                                                                                   | 463                                                                               | 1698                                                                              |                                                                                   |                                                                                   | 267                                                                               | 1520                                                                                | 741                                                                                 |                                                                                     | 79                                                                                  | 967                                                                                 | 155                                                                                 |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 |                                                                                   |                                                                                   | 0                                                                                 | 0                                                                                   | 0                                                                                   |                                                                                     | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       |                                                                                   | 0.74                                                                              | 0.72                                                                              |                                                                                   |                                                                                   | 0.69                                                                              | 0.90                                                                                | 0.16                                                                                |                                                                                     | 0.27                                                                                | 0.31                                                                                | 0.90                                                                                |

#### Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 15 (12%), Referenced to phase 2:EBT and 6:WBT, Start of Green

Natural Cycle: 125

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 40.5

Intersection LOS: D

Intersection Capacity Utilization 104.1%

ICU Level of Service G

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Hazeldean & Robert Grant





| Lane Group              | SBT   | SBR    |
|-------------------------|-------|--------|
| Minimum Initial (s)     | 10.0  | 10.0   |
| Minimum Split (s)       | 41.1  | 41.1   |
| Total Split (s)         | 42.0  | 42.0   |
| Total Split (%)         | 32.3% | 32.3%  |
| Maximum Green (s)       | 35.9  | 35.9   |
| Yellow Time (s)         | 3.3   | 3.3    |
| All-Red Time (s)        | 2.8   | 2.8    |
| Lost Time Adjust (s)    | 0.0   | 0.0    |
| Total Lost Time (s)     | 6.1   | 6.1    |
| Lead/Lag                | Lag   | Lag    |
| Lead-Lag Optimize?      |       |        |
| Vehicle Extension (s)   | 3.0   | 3.0    |
| Recall Mode             | None  | None   |
| Walk Time (s)           | 7.0   | 7.0    |
| Flash Dont Walk (s)     | 28.0  | 28.0   |
| Pedestrian Calls (#/hr) | 5     | 5      |
| Act Effct Green (s)     | 31.0  | 31.0   |
| Actuated g/C Ratio      | 0.24  | 0.24   |
| v/c Ratio               | 0.59  | 0.87   |
| Control Delay           | 46.4  | 46.3   |
| Queue Delay             | 0.0   | 0.0    |
| Total Delay             | 46.4  | 46.3   |
| LOS                     | D     | D      |
| Approach Delay          | 54.9  |        |
| Approach LOS            | D     |        |
| Queue Length 50th (m)   | 53.8  | 62.9   |
| Queue Length 95th (m)   | 67.5  | #101.0 |
| Internal Link Dist (m)  | 227.2 |        |
| Turn Bay Length (m)     |       | 60.0   |
| Base Capacity (vph)     | 967   | 556    |
| Starvation Cap Reductn  | 0     | 0      |
| Spillback Cap Reductn   | 0     | 0      |
| Storage Cap Reductn     | 0     | 0      |
| Reduced v/c Ratio       | 0.51  | 0.79   |
| Intersection Summary    |       |        |



4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2036 Total Traffic (demand rationalized)

|                            |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group                 | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Lane Configurations        |                                                                                   |  |  |  |                                                                                   |  |  |  |  |  |  |                                                                                     |
| Traffic Volume (vph)       | 2                                                                                 | 411                                                                               | 866                                                                               | 298                                                                               | 14                                                                                | 340                                                                               | 913                                                                                | 348                                                                                 | 309                                                                                 | 814                                                                                 | 234                                                                                 | 1                                                                                   |
| Future Volume (vph)        | 2                                                                                 | 411                                                                               | 866                                                                               | 298                                                                               | 14                                                                                | 340                                                                               | 913                                                                                | 348                                                                                 | 309                                                                                 | 814                                                                                 | 234                                                                                 | 1                                                                                   |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                              | 1800                                                                               | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                | 1800                                                                                |
| Storage Length (m)         |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Storage Lanes              |                                                                                   | 2                                                                                 |                                                                                   | 1                                                                                 |                                                                                   | 2                                                                                 |                                                                                    | 1                                                                                   | 1                                                                                   |                                                                                     | 1                                                                                   |                                                                                     |
| Taper Length (m)           |                                                                                   | 100.0                                                                             |                                                                                   |                                                                                   |                                                                                   | 45.0                                                                              |                                                                                    |                                                                                     | 40.0                                                                                |                                                                                     |                                                                                     |                                                                                     |
| Lane Util. Factor          | 0.95                                                                              | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              | 0.95                                                                              | 0.97                                                                              | 0.95                                                                               | 1.00                                                                                | 0.97                                                                                | 0.95                                                                                | 1.00                                                                                | 0.95                                                                                |
| Ped Bike Factor            |                                                                                   | 1.00                                                                              |                                                                                   | 0.95                                                                              |                                                                                   | 0.99                                                                              |                                                                                    | 0.98                                                                                | 1.00                                                                                |                                                                                     | 0.97                                                                                |                                                                                     |
| Frt                        |                                                                                   |                                                                                   |                                                                                   | 0.850                                                                             |                                                                                   |                                                                                   |                                                                                    | 0.850                                                                               |                                                                                     |                                                                                     | 0.850                                                                               |                                                                                     |
| Flt Protected              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (prot)          | 0                                                                                 | 3364                                                                              | 3537                                                                              | 1551                                                                              | 0                                                                                 | 3398                                                                              | 3537                                                                               | 1551                                                                                | 3397                                                                                | 3468                                                                                | 1567                                                                                | 0                                                                                   |
| Flt Permitted              |                                                                                   | 0.950                                                                             |                                                                                   |                                                                                   |                                                                                   | 0.950                                                                             |                                                                                    |                                                                                     | 0.950                                                                               |                                                                                     |                                                                                     |                                                                                     |
| Satd. Flow (perm)          | 0                                                                                 | 3358                                                                              | 3537                                                                              | 1481                                                                              | 0                                                                                 | 3368                                                                              | 3537                                                                               | 1521                                                                                | 3386                                                                                | 3468                                                                                | 1527                                                                                | 0                                                                                   |
| Right Turn on Red          |                                                                                   |                                                                                   |                                                                                   | Yes                                                                               |                                                                                   |                                                                                   |                                                                                    | Yes                                                                                 |                                                                                     |                                                                                     | Yes                                                                                 |                                                                                     |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   |                                                                                   | 232                                                                               |                                                                                   |                                                                                   |                                                                                    | 174                                                                                 |                                                                                     |                                                                                     | 150                                                                                 |                                                                                     |
| Link Speed (k/h)           |                                                                                   |                                                                                   | 60                                                                                |                                                                                   |                                                                                   |                                                                                   | 60                                                                                 |                                                                                     |                                                                                     | 70                                                                                  |                                                                                     |                                                                                     |
| Link Distance (m)          |                                                                                   |                                                                                   | 644.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 157.6                                                                              |                                                                                     |                                                                                     | 142.7                                                                               |                                                                                     |                                                                                     |
| Travel Time (s)            |                                                                                   |                                                                                   | 38.7                                                                              |                                                                                   |                                                                                   |                                                                                   | 9.5                                                                                |                                                                                     |                                                                                     | 7.3                                                                                 |                                                                                     |                                                                                     |
| Confl. Peds. (#/hr)        |                                                                                   | 5                                                                                 |                                                                                   | 24                                                                                |                                                                                   | 24                                                                                |                                                                                    | 5                                                                                   | 5                                                                                   |                                                                                     | 10                                                                                  |                                                                                     |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   |                                                                                   | 6                                                                                 |                                                                                   |                                                                                   |                                                                                    | 2                                                                                   |                                                                                     |                                                                                     | 1                                                                                   |                                                                                     |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Heavy Vehicles (%)         | 1%                                                                                | 3%                                                                                | 1%                                                                                | 3%                                                                                | 1%                                                                                | 2%                                                                                | 1%                                                                                 | 3%                                                                                  | 2%                                                                                  | 3%                                                                                  | 2%                                                                                  | 1%                                                                                  |
| Adj. Flow (vph)            | 2                                                                                 | 411                                                                               | 866                                                                               | 298                                                                               | 14                                                                                | 340                                                                               | 913                                                                                | 348                                                                                 | 309                                                                                 | 814                                                                                 | 234                                                                                 | 1                                                                                   |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Lane Group Flow (vph)      | 0                                                                                 | 413                                                                               | 866                                                                               | 298                                                                               | 0                                                                                 | 354                                                                               | 913                                                                                | 348                                                                                 | 309                                                                                 | 814                                                                                 | 234                                                                                 | 0                                                                                   |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                | No                                                                                 | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  | No                                                                                  |
| Lane Alignment             | R NA                                                                              | L NA                                                                              | Left                                                                              | R NA                                                                              | R NA                                                                              | L NA                                                                              | Left                                                                               | R NA                                                                                | L NA                                                                                | Left                                                                                | R NA                                                                                | R NA                                                                                |
| Median Width(m)            |                                                                                   |                                                                                   | 10.0                                                                              |                                                                                   |                                                                                   |                                                                                   | 12.0                                                                               |                                                                                     |                                                                                     | 10.0                                                                                |                                                                                     |                                                                                     |
| Link Offset(m)             |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Crosswalk Width(m)         |                                                                                   |                                                                                   | 5.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 5.0                                                                                |                                                                                     |                                                                                     | 5.0                                                                                 |                                                                                     |                                                                                     |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              | 1.01                                                                               | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                | 1.01                                                                                |
| Turning Speed (k/h)        | 14                                                                                | 24                                                                                |                                                                                   | 14                                                                                | 14                                                                                | 24                                                                                |                                                                                    | 14                                                                                  | 24                                                                                  |                                                                                     | 14                                                                                  | 14                                                                                  |
| Number of Detectors        | 1                                                                                 | 1                                                                                 | 2                                                                                 | 1                                                                                 | 1                                                                                 | 1                                                                                 | 2                                                                                  | 1                                                                                   | 1                                                                                   | 2                                                                                   | 1                                                                                   | 1                                                                                   |
| Detector Template          | Left                                                                              | Left                                                                              | Thru                                                                              | Right                                                                             | Left                                                                              | Left                                                                              | Thru                                                                               | Right                                                                               | Left                                                                                | Thru                                                                                | Right                                                                               | Left                                                                                |
| Leading Detector (m)       | 2.0                                                                               | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 10.0                                                                               | 2.0                                                                                 | 2.0                                                                                 | 10.0                                                                                | 2.0                                                                                 | 2.0                                                                                 |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Size(m)         | 2.0                                                                               | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               | 2.0                                                                               | 2.0                                                                               | 0.6                                                                                | 2.0                                                                                 | 2.0                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 2.0                                                                                 |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                              | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               | Cl+Ex                                                                               |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Detector 2 Position(m)     |                                                                                   |                                                                                   | 9.4                                                                               |                                                                                   |                                                                                   |                                                                                   | 9.4                                                                                |                                                                                     |                                                                                     | 9.4                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Size(m)         |                                                                                   |                                                                                   | 0.6                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.6                                                                                |                                                                                     |                                                                                     | 0.6                                                                                 |                                                                                     |                                                                                     |
| Detector 2 Type            |                                                                                   |                                                                                   | Cl+Ex                                                                             |                                                                                   |                                                                                   |                                                                                   | Cl+Ex                                                                              |                                                                                     |                                                                                     | Cl+Ex                                                                               |                                                                                     |                                                                                     |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Detector 2 Extend (s)      |                                                                                   |                                                                                   | 0.0                                                                               |                                                                                   |                                                                                   |                                                                                   | 0.0                                                                                |                                                                                     |                                                                                     | 0.0                                                                                 |                                                                                     |                                                                                     |
| Turn Type                  | Prot                                                                              | Prot                                                                              | NA                                                                                | Perm                                                                              | Prot                                                                              | Prot                                                                              | NA                                                                                 | Perm                                                                                | Prot                                                                                | NA                                                                                  | Perm                                                                                | Prot                                                                                |
| Protected Phases           | 7                                                                                 | 7                                                                                 | 4                                                                                 |                                                                                   | 3                                                                                 | 3                                                                                 | 8                                                                                  |                                                                                     | 5                                                                                   | 2                                                                                   |                                                                                     | 1                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   |                                                                                   | 4                                                                                 |                                                                                   |                                                                                   |                                                                                    | 8                                                                                   |                                                                                     |                                                                                     | 2                                                                                   |                                                                                     |
| Detector Phase             | 7                                                                                 | 7                                                                                 | 4                                                                                 | 4                                                                                 | 3                                                                                 | 3                                                                                 | 8                                                                                  | 8                                                                                   | 5                                                                                   | 2                                                                                   | 2                                                                                   | 1                                                                                   |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2036 Total Traffic (demand rationalized)

|                            |  |  |  |
|----------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| Lane Group                 | SBL                                                                               | SBT                                                                               | SBR                                                                               |
| Lane Configurations        |  |  |  |
| Traffic Volume (vph)       | 306                                                                               | 819                                                                               | 485                                                                               |
| Future Volume (vph)        | 306                                                                               | 819                                                                               | 485                                                                               |
| Ideal Flow (vphpl)         | 1800                                                                              | 1800                                                                              | 1800                                                                              |
| Storage Length (m)         | 155.0                                                                             |                                                                                   | 200.0                                                                             |
| Storage Lanes              | 2                                                                                 |                                                                                   | 1                                                                                 |
| Taper Length (m)           | 75.0                                                                              |                                                                                   |                                                                                   |
| Lane Util. Factor          | 0.97                                                                              | 0.95                                                                              | 1.00                                                                              |
| Ped Bike Factor            | 0.99                                                                              |                                                                                   | 0.98                                                                              |
| Frt                        |                                                                                   |                                                                                   | 0.850                                                                             |
| Flt Protected              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (prot)          | 3431                                                                              | 3502                                                                              | 1567                                                                              |
| Flt Permitted              | 0.950                                                                             |                                                                                   |                                                                                   |
| Satd. Flow (perm)          | 3408                                                                              | 3502                                                                              | 1537                                                                              |
| Right Turn on Red          |                                                                                   |                                                                                   | Yes                                                                               |
| Satd. Flow (RTOR)          |                                                                                   |                                                                                   | 265                                                                               |
| Link Speed (k/h)           |                                                                                   | 70                                                                                |                                                                                   |
| Link Distance (m)          |                                                                                   | 316.2                                                                             |                                                                                   |
| Travel Time (s)            |                                                                                   | 16.3                                                                              |                                                                                   |
| Confl. Peds. (#/hr)        | 10                                                                                |                                                                                   | 5                                                                                 |
| Confl. Bikes (#/hr)        |                                                                                   |                                                                                   | 1                                                                                 |
| Peak Hour Factor           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              |
| Heavy Vehicles (%)         | 1%                                                                                | 2%                                                                                | 2%                                                                                |
| Adj. Flow (vph)            | 306                                                                               | 819                                                                               | 485                                                                               |
| Shared Lane Traffic (%)    |                                                                                   |                                                                                   |                                                                                   |
| Lane Group Flow (vph)      | 307                                                                               | 819                                                                               | 485                                                                               |
| Enter Blocked Intersection | No                                                                                | No                                                                                | No                                                                                |
| Lane Alignment             | Left                                                                              | Left                                                                              | Right                                                                             |
| Median Width(m)            |                                                                                   | 10.0                                                                              |                                                                                   |
| Link Offset(m)             |                                                                                   | 0.0                                                                               |                                                                                   |
| Crosswalk Width(m)         |                                                                                   | 5.0                                                                               |                                                                                   |
| Two way Left Turn Lane     |                                                                                   |                                                                                   |                                                                                   |
| Headway Factor             | 1.01                                                                              | 1.01                                                                              | 1.01                                                                              |
| Turning Speed (k/h)        | 24                                                                                |                                                                                   | 14                                                                                |
| Number of Detectors        | 1                                                                                 | 2                                                                                 | 1                                                                                 |
| Detector Template          | Left                                                                              | Thru                                                                              | Right                                                                             |
| Leading Detector (m)       | 2.0                                                                               | 10.0                                                                              | 2.0                                                                               |
| Trailing Detector (m)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Position(m)     | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Size(m)         | 2.0                                                                               | 0.6                                                                               | 2.0                                                                               |
| Detector 1 Type            | Cl+Ex                                                                             | Cl+Ex                                                                             | Cl+Ex                                                                             |
| Detector 1 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 1 Extend (s)      | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Queue (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 1 Delay (s)       | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |
| Detector 2 Position(m)     |                                                                                   | 9.4                                                                               |                                                                                   |
| Detector 2 Size(m)         |                                                                                   | 0.6                                                                               |                                                                                   |
| Detector 2 Type            |                                                                                   | Cl+Ex                                                                             |                                                                                   |
| Detector 2 Channel         |                                                                                   |                                                                                   |                                                                                   |
| Detector 2 Extend (s)      |                                                                                   | 0.0                                                                               |                                                                                   |
| Turn Type                  | Prot                                                                              | NA                                                                                | Perm                                                                              |
| Protected Phases           | 1                                                                                 | 6                                                                                 |                                                                                   |
| Permitted Phases           |                                                                                   |                                                                                   | 6                                                                                 |
| Detector Phase             | 1                                                                                 | 6                                                                                 | 6                                                                                 |

4: Terry Fox & Hazeldean  
PM Peak Hour

560 Hazeldean Road  
2036 Total Traffic (demand rationalized)

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBU                                                                               | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBU                                                                               | WBL                                                                               | WBT                                                                                | WBR                                                                                 | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBU                                                                                 |
| Switch Phase            |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Minimum Initial (s)     | 5.0                                                                               | 5.0                                                                               | 10.0                                                                              | 10.0                                                                              | 5.0                                                                               | 5.0                                                                               | 10.0                                                                               | 10.0                                                                                | 5.0                                                                                 | 10.0                                                                                | 10.0                                                                                | 5.0                                                                                 |
| Minimum Split (s)       | 11.5                                                                              | 11.5                                                                              | 35.5                                                                              | 35.5                                                                              | 11.5                                                                              | 11.5                                                                              | 34.5                                                                               | 34.5                                                                                | 11.5                                                                                | 35.5                                                                                | 35.5                                                                                | 11.5                                                                                |
| Total Split (s)         | 23.0                                                                              | 23.0                                                                              | 42.0                                                                              | 42.0                                                                              | 23.0                                                                              | 23.0                                                                              | 42.0                                                                               | 42.0                                                                                | 18.0                                                                                | 37.0                                                                                | 37.0                                                                                | 18.0                                                                                |
| Total Split (%)         | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                             | 35.0%                                                                             | 19.2%                                                                             | 19.2%                                                                             | 35.0%                                                                              | 35.0%                                                                               | 15.0%                                                                               | 30.8%                                                                               | 30.8%                                                                               | 15.0%                                                                               |
| Maximum Green (s)       | 16.5                                                                              | 16.5                                                                              | 35.5                                                                              | 35.5                                                                              | 16.5                                                                              | 16.5                                                                              | 35.5                                                                               | 35.5                                                                                | 11.5                                                                                | 30.5                                                                                | 30.5                                                                                | 11.5                                                                                |
| Yellow Time (s)         | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                               | 3.7                                                                                | 3.7                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 | 4.2                                                                                 |
| All-Red Time (s)        | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                               | 2.8                                                                                | 2.8                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 | 2.3                                                                                 |
| Lost Time Adjust (s)    |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |
| Total Lost Time (s)     |                                                                                   | 6.5                                                                               | 6.5                                                                               | 6.5                                                                               |                                                                                   | 6.5                                                                               | 6.5                                                                                | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 | 6.5                                                                                 |                                                                                     |
| Lead/Lag                | Lead                                                                              | Lead                                                                              | Lag                                                                               | Lag                                                                               | Lead                                                                              | Lead                                                                              | Lag                                                                                | Lag                                                                                 | Lead                                                                                | Lag                                                                                 | Lag                                                                                 | Lead                                                                                |
| Lead-Lag Optimize?      |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Vehicle Extension (s)   | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                               | 3.0                                                                                | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 | 3.0                                                                                 |
| Recall Mode             | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                              | None                                                                               | None                                                                                | None                                                                                | C-Max                                                                               | C-Max                                                                               | None                                                                                |
| Walk Time (s)           |                                                                                   |                                                                                   | 7.0                                                                               | 7.0                                                                               |                                                                                   |                                                                                   | 7.0                                                                                | 7.0                                                                                 |                                                                                     | 7.0                                                                                 | 7.0                                                                                 |                                                                                     |
| Flash Dont Walk (s)     |                                                                                   |                                                                                   | 22.0                                                                              | 22.0                                                                              |                                                                                   |                                                                                   | 21.0                                                                               | 21.0                                                                                |                                                                                     | 22.0                                                                                | 22.0                                                                                |                                                                                     |
| Pedestrian Calls (#/hr) |                                                                                   |                                                                                   | 24                                                                                | 24                                                                                |                                                                                   |                                                                                   | 5                                                                                  | 5                                                                                   |                                                                                     | 10                                                                                  | 10                                                                                  |                                                                                     |
| Act Effct Green (s)     |                                                                                   | 16.4                                                                              | 35.0                                                                              | 35.0                                                                              |                                                                                   | 15.8                                                                              | 34.4                                                                               | 34.4                                                                                | 12.1                                                                                | 31.2                                                                                | 31.2                                                                                |                                                                                     |
| Actuated g/C Ratio      |                                                                                   | 0.14                                                                              | 0.29                                                                              | 0.29                                                                              |                                                                                   | 0.13                                                                              | 0.29                                                                               | 0.29                                                                                | 0.10                                                                                | 0.26                                                                                | 0.26                                                                                |                                                                                     |
| v/c Ratio               |                                                                                   | 0.90                                                                              | 0.84                                                                              | 0.50                                                                              |                                                                                   | 0.79                                                                              | 0.90                                                                               | 0.62                                                                                | 0.90                                                                                | 0.90                                                                                | 0.46                                                                                |                                                                                     |
| Control Delay           |                                                                                   | 74.3                                                                              | 48.3                                                                              | 11.6                                                                              |                                                                                   | 52.0                                                                              | 61.7                                                                               | 33.5                                                                                | 91.1                                                                                | 49.5                                                                                | 10.1                                                                                |                                                                                     |
| Queue Delay             |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.2                                                                                 |                                                                                     |
| Total Delay             |                                                                                   | 74.3                                                                              | 48.3                                                                              | 11.6                                                                              |                                                                                   | 52.0                                                                              | 61.7                                                                               | 33.5                                                                                | 91.1                                                                                | 49.5                                                                                | 10.4                                                                                |                                                                                     |
| LOS                     |                                                                                   | E                                                                                 | D                                                                                 | B                                                                                 |                                                                                   | D                                                                                 | E                                                                                  | C                                                                                   | F                                                                                   | D                                                                                   | B                                                                                   |                                                                                     |
| Approach Delay          |                                                                                   |                                                                                   | 48.2                                                                              |                                                                                   |                                                                                   |                                                                                   | 53.5                                                                               |                                                                                     |                                                                                     | 52.2                                                                                |                                                                                     |                                                                                     |
| Approach LOS            |                                                                                   |                                                                                   | D                                                                                 |                                                                                   |                                                                                   |                                                                                   | D                                                                                  |                                                                                     |                                                                                     | D                                                                                   |                                                                                     |                                                                                     |
| Queue Length 50th (m)   |                                                                                   | 46.0                                                                              | 92.1                                                                              | 10.6                                                                              |                                                                                   | 38.8                                                                              | 105.8                                                                              | 45.0                                                                                | 29.3                                                                                | 91.5                                                                                | 17.1                                                                                |                                                                                     |
| Queue Length 95th (m)   |                                                                                   | #70.8                                                                             | 114.8                                                                             | 33.6                                                                              |                                                                                   | #52.4                                                                             | #133.3                                                                             | 82.3                                                                                | #61.3                                                                               | #125.2                                                                              | 9.0                                                                                 |                                                                                     |
| Internal Link Dist (m)  |                                                                                   |                                                                                   | 620.5                                                                             |                                                                                   |                                                                                   |                                                                                   | 133.6                                                                              |                                                                                     |                                                                                     | 118.7                                                                               |                                                                                     |                                                                                     |
| Turn Bay Length (m)     |                                                                                   | 210.0                                                                             |                                                                                   | 95.0                                                                              |                                                                                   | 60.0                                                                              |                                                                                    | 70.0                                                                                | 30.0                                                                                |                                                                                     | 40.0                                                                                |                                                                                     |
| Base Capacity (vph)     |                                                                                   | 462                                                                               | 1046                                                                              | 601                                                                               |                                                                                   | 467                                                                               | 1046                                                                               | 572                                                                                 | 343                                                                                 | 901                                                                                 | 507                                                                                 |                                                                                     |
| Starvation Cap Reductn  |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Spillback Cap Reductn   |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 37                                                                                  |                                                                                     |
| Storage Cap Reductn     |                                                                                   | 0                                                                                 | 0                                                                                 | 0                                                                                 |                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |                                                                                     |
| Reduced v/c Ratio       |                                                                                   | 0.89                                                                              | 0.83                                                                              | 0.50                                                                              |                                                                                   | 0.76                                                                              | 0.87                                                                               | 0.61                                                                                | 0.90                                                                                | 0.90                                                                                | 0.50                                                                                |                                                                                     |

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 32 (27%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 105

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 55.0

Intersection LOS: E

Intersection Capacity Utilization 102.3%

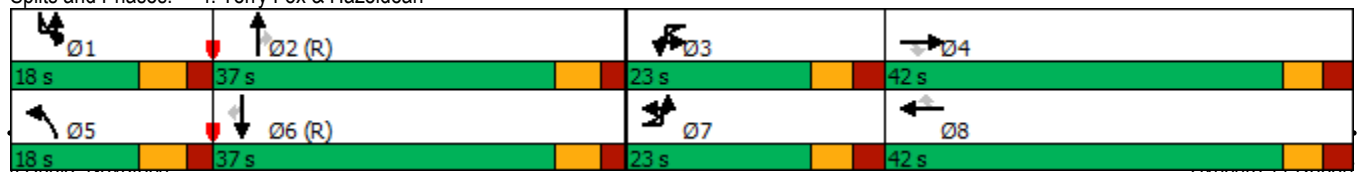
ICU Level of Service G

Analysis Period (min) 15

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: Terry Fox & Hazeldean





| Lane Group              | SBL   | SBT    | SBR    |
|-------------------------|-------|--------|--------|
| Switch Phase            |       |        |        |
| Minimum Initial (s)     | 5.0   | 10.0   | 10.0   |
| Minimum Split (s)       | 11.5  | 35.5   | 35.5   |
| Total Split (s)         | 18.0  | 37.0   | 37.0   |
| Total Split (%)         | 15.0% | 30.8%  | 30.8%  |
| Maximum Green (s)       | 11.5  | 30.5   | 30.5   |
| Yellow Time (s)         | 4.2   | 4.2    | 4.2    |
| All-Red Time (s)        | 2.3   | 2.3    | 2.3    |
| Lost Time Adjust (s)    | 0.0   | 0.0    | 0.0    |
| Total Lost Time (s)     | 6.5   | 6.5    | 6.5    |
| Lead/Lag                | Lead  | Lag    | Lag    |
| Lead-Lag Optimize?      |       |        |        |
| Vehicle Extension (s)   | 3.0   | 3.0    | 3.0    |
| Recall Mode             | None  | C-Max  | C-Max  |
| Walk Time (s)           |       | 7.0    | 7.0    |
| Flash Dont Walk (s)     |       | 22.0   | 22.0   |
| Pedestrian Calls (#/hr) |       | 10     | 10     |
| Act Effct Green (s)     | 12.0  | 31.1   | 31.1   |
| Actuated g/C Ratio      | 0.10  | 0.26   | 0.26   |
| v/c Ratio               | 0.90  | 0.90   | 0.82   |
| Control Delay           | 83.3  | 58.4   | 33.5   |
| Queue Delay             | 52.3  | 0.0    | 0.0    |
| Total Delay             | 135.6 | 58.4   | 33.5   |
| LOS                     | F     | E      | C      |
| Approach Delay          |       | 65.6   |        |
| Approach LOS            |       | E      |        |
| Queue Length 50th (m)   | 36.9  | 71.8   | 31.8   |
| Queue Length 95th (m)   | #61.1 | #122.0 | #101.1 |
| Internal Link Dist (m)  |       | 292.2  |        |
| Turn Bay Length (m)     | 155.0 |        | 200.0  |
| Base Capacity (vph)     | 343   | 907    | 594    |
| Starvation Cap Reductn  | 0     | 0      | 0      |
| Spillback Cap Reductn   | 110   | 0      | 0      |
| Storage Cap Reductn     | 0     | 0      | 0      |
| Reduced v/c Ratio       | 1.32  | 0.90   | 0.82   |
| Intersection Summary    |       |        |        |